

OBSERVATIONS ON
RECURRENT VOMITING WITH ACETONURIA
IN CHILDREN

Volume II



APPENDIX

ORIGINAL CASE-HISTORIES

CASE 1 Margaret D.

Youngest child of W.D., oldest son of W.D. Senior.

Born 23:1:30

Breast fed for three months; teething at nine to ten months; walking at eleven months.

Up to the age of nine to ten months she was a very healthy baby. At that time she developed a very bad attack of sickness. The condition started with her going off food and being troubled with heat spots, and she became very pale. She was incessantly sick for over a week, got very thin and appeared to be dying. The condition was diagnosed first as teething and later as "a very severe chill of the stomach".

She had several other attacks which were diagnosed as "bile attacks".

The history was always the same - heat spots, anorexia, pallor, followed by sickness lasting four to five days. Her mother always noticed that about seven to ten days before an attack she was very hungry and always wanting food. There did not seem to be any regularity in the times of attacks.

First seen 22:5:32

Above history elicited from mother.

Present complaint "bile-attack".

Thin, pale, nervous child, sick since the previous /

previous night.

Age two years four months; her mother said "she always took too much out of herself, always being on the move, this was especially so before an attack came on".

Tongue was furred, no temperature, pulse normal, no abdominal tenderness, the bowels had moved the previous day, signs of heat spots which are clearing.

Treatment Put on equal parts of boiled milk and water and given 1 grain calomel.

23:5:32 Seemed much better, only occasional sickness.

Treatment Put on boiled milk,

24:4:32 Was not seen.

25:5:32 Sickness much worse, being sick even without food. Vomitus bile-stained mucus. Pulse and temperature normal. Child fretful and did not want to be disturbed. Breath smelt of acetone.

Urine: Acetone triple positive. No other abnormalities.

Treatment Put on equal parts of skimmed milk and water with extra sugar and sodium bicarbonate grain v, pulv. rhei grain i, hyd. c̄ cret. grain $\frac{1}{4}$ t.i.d.

26:5:32 Sickness much better.

27:5:32 Sickness stopped.

Urine: Acetone positive.

Treatment /

Treatment Put on non-fatty diet, skimmed milk, extra sugar, same powders.

29:5:32 No sickness, child appears well, allowed out of bed.

Urine: Acetone a trace.

31:5:32 Child well. Advised ordinary diet with reduced fats.

24:11:32 Violent sickness.

She has been troubled off and on with heat spots since her last attack. For past two or three days has gone pale and been off food. Now being violently sick. At first vomitus was the food she had been taking, now it is watery bile-stained mucus. Child looks pale and languid. Pulse and temperature normal, bowels have not moved for two days, tongue coated.

Treatment Given small feeds of skimmed milk and water, and extra sugar.

24:11:32 Night Still violently sick. Breath smelt of acetone.

Urine: Acetone triple positive.

Treatment Put on sugar and water and sodium bicarbonate powders.

25:11:32 Sickness less. Pulse and temperature normal. Same treatment.

Urine: Acetone double positive. No other abnormalities.

27:11:32 /

27:11:32 Still occasional sickness. Same treatment.

28:11:32 Still occasional sickness. Same treatment.

29:11:32 Sickness stopped.

Urine: Acetone positive.

Treatment Put on light non-fatty diet, skimmed milk, extra sugar.

1:12:32 Child well.

Urine: Acetone a trace.

4:12:32 Child well; appetite good; colour coming back to face. Urine: Acetone positive.

The condition was explained to the mother; she was advised to look for the early symptoms and when these were present to put child off all fats and to see that adequate rest is given.

The child continued having intermittent attacks until the middle of 1939. The period between the attacks became longer, but the symptoms were always similar. Usually initially an attack of heat spots, with marked restlessness and over-activity, and greatly increased appetite, then loss of all colour, and development of "chalky" pallor; the child would appear "done", go off its food, with later improvement in appetite, and then followed the sickness.

In most cases the mother treated the attack herself /

herself by putting the child to bed and giving sugar and water, and sodium bicarbonate powders until sickness passed off, followed by a non-fatty diet for three to four days. The pallor of the face always remained for a long time afterwards.

The last time I attended her was for an attack during the middle of 1939 while her mother was in hospital. The sickness lasted two days. She had lost all colour and had a furred tongue, the pulse and temperature were normal, the bowels had not moved for two days; the urine was loaded with acetone but showed no other abnormalities. The sickness stopped on the second day but the urine was not clear of acetone until nine to ten days afterwards.

She is now a tall, well-built girl. Her mother states that she is still very shy and nervous, and occasionally after a lot of excitement she is apt to suffer from nocturnal enuresis. She seems to be able to take an ordinary diet without ill effects.

At fourteen years and five months menstruation has not begun.

CASE 2 Hugh D.

Oldest child of W.D., oldest son of H.D.

Born 14:4:36

Seven and a half pounds at birth; breast fed three to four months; fed on Sister Lauras Food. Teething nine to ten months. Walking ten months. Born in Bellshill Maternity Hospital. On the tenth day developed septic fingers, the infection was limited to the terminal phalanx of all the fingers except the left index finger. This condition lasted two to three months. About the age of six months suffered a lot from heat spots, the attacks usually lasted ten to fourteen days. Following these attacks went off his food and had attacks of sickness usually lasting four to five days. The condition was at that time diagnosed as bilious attacks.

At ten months was threatened with appendicitis - went off his food, became very listless, developed incessant sickness, became very thin and pale. This attack lasted three to four weeks. At the beginning of the attack he had just started walking and for several months after the attack he always appeared very tired and listless and was off his feed.

About three years of age he developed scarlet fever, was treated in Motherwell Hospital for five to six weeks. On leaving the hospital the mother was told /

told not to give him porridge as it was "heating the blood" and causing heat spots.

Has always been a very nervous child.

The family came to this district about the 13th-14th December, 1939. Saw the child on Monday, 16th December, 1939; has had sickness for past two days. Was given the above history.

Examination

Small, thin, pale very nervous child, bright eyes with long eyelashes. Pulse and temperature normal, tongue furred, bowels had not moved for two to three days, no abdominal tenderness. No previous examination of the urine done as far as the mother knew. Examination of the urine showed acetone triple positive, mucus deposit, no albumen, no sugar.

Treatment

Was put off everything but sugar and water and a dose of Milk of Magnesia advised.

17:12:39 No improvement, pulse and temperature normal. Strong smell of acetone in the breath.

Treatment Put on sips of sodium bicarbonate in water.

Urine: Acetone triple positive, mucus deposit increasing.

18:12:39 The sips of sodium bicarbonate and water seemed to stay down longer to begin with only to be followed by sickness. Was now incessantly sick, vomiting /

vomiting bile-stained mucus. The general condition of the child rapidly deteriorating; temperature 98 degrees; pulse rapid and irregular; eyes sunken in head; abdomen hollow but not tender.

Treatment Sips of sugar and water alternately with sips of sodium bicarbonate in water.

Night visit; condition same. Hands and feet felt cold. Tongue thickly coated. Child looking very ill.

19:12:39 Condition same, rapidly deteriorating, pulse rapid and irregular, temperature subnormal, skin very ashen. Saw the child several times that day, no change. Urine was loaded with acetone, much mucus, slight amount of albumen, no sugar.

Was sent to Stirling Royal Infirmary with diagnosis of Cyclic Vomiting.

Child died in hospital on 26:12:39.

Cause of death - Acetonuria.

CASE 3 Jean D.

Second child of W. D. son of H. D.

Born 14:5:38

Bottle fed from birth; teething ten to eleven months; walking thirteen months. History of repeated attacks of heat spots, off food, very fretful, paleness and "hanging". No actual sickness but sick feeling.

22:1:40 Off food, very fretful, occasional dry sickness, no actual vomiting.

Very small, thin, pale, nervous, excitable child. Pulse rapid, temperature 99 degrees. Tongue coated; not constipated; no abdominal tenderness. Breath smelt of acetone.

Urine: Acetone triple positive. No other abnormalities.

Treatment Glucose and sodium bicarbonate drinks.

23:1:40 Restless night, still fretful, no sickness, pulse rapid, temperature normal.

24:1:40 Slept all night, no sickness, pulse and temperature normal.

Urine: Acetone double positive.

26:1:40 Child looking better, wants food.

Urine: Acetone double positive.

Treatment Non-fatty diet, skimmed milk, extra sugar, sodium bicarbonate night and morning.

27:1:40 /

27:1:40 Urine: Acetone double positive.

No other abnormalities.

29:1:40 Appetite returned. Very noticeable how easily the child flushes against the pale skin. Not crying now when being examined.

Urine: Acetone positive.

Treatment Ordinary diet, skimmed milk, extra sugar, no fats, still sodium bicarbonate drinks.

1:2:40 Child appears well, still pale; moderately friendly, wants me to play with her toys.

Urine: Acetone a trace.

Called daily for following week; became very friendly; taking her food well, still pale, by the end of the week the urine was free of acetone.

Advised the mother about the condition, early symptoms, adequate rest, limited fats, extra sugar, Adexolin drops, attend to teeth.

I noticed that for several weeks afterwards when I met the child outside she would blush and run and hide. On several occasions I attended her for bad attacks of heat spots. The urine always showed acetone double positive. One or two days in bed on a non-fatty diet and the spots cleared. Seven to eight days afterwards the urine cleared.

5:12:40 Sickness

Has been pale, off food and "hanging" for past two /

two to three days. Had been very well before but had always to be on the move, not sleeping in the afternoons and not sleeping well at night.

Examination

Pulse rapid, temperature 101 degrees, tongue coated, abdominal pain localised about the umbilicus, tenderness in the right iliac fossa, no rigidity, breath smelt of acetone.

Urine: Acetone triple positive, trace of albumen, no sugar.

Treatment

Glucose and sodium bicarbonate.

Night visit - sickness much better, temperature 99 degrees, pulse fast.

No abdominal pain or tenderness.

6:12:40 Sickness stopped, temperature normal, pulse normal, tongue cleaner, bowels moved.

Urine: Acetone double positive.

Treatment Same.

7:12:40 No sickness, no abdominal tenderness or pain, pulse and temperature normal.

Urine: Acetone positive.

Treatment Skimmed milk and water equal parts, extra sugar, sodium bicarbonate.

8:12:40 Appears well, wants food and out of bed. Pulse and temperature normal, tongue clean.

Treatment /

Treatment Ordinary non-fatty diet, extra sugar,
sodium bicarbonate.

11:12:40 Urine: Acetone a trace.

18:12:40 Urine: Clear.

CASE 4 May D.

Third child of W.D., son of H. D.

Born 2:2:41

Breast fed one month; teething fifteen months; walking eleven months.

History 24:2:42

Heat spots, off food, very irritable, annoying cough.

Examination

Small, very nervous, pale child, evidence of heat spots, irritating cough. Very excitable, impossible to examine; no temperature, pulse fast, tongue furred, constipated.

26:2:42 Sickness after coughing especially at night.

Child still very irritable, no temperature, pulse still fast, bowels not moved.

Urine: Acetone triple positive. No other abnormalities.

Treatment Small feeds of sugar and water and sodium bicarbonate and water.

27:2:42 Being violently sick especially after the sugar and water. Sodium bicarbonate drinks staying down longer, five to ten minutes.

Treatment Sips of sodium bicarbonate and water.

Advised to try sips of soda water; dose of Milk of Magnesia.

28:2:42 /

28:2:42 Sickness much better, bowels moved, child much more content. Temperature normal, pulse normal, very little coughing, nothing abnormal found in the chest. Abdomen not tender.

Urine: Acetone triple positive.

Treatment Sugar and water, sodium bicarbonate and water.

29:2:42 Very little sickness. Child very thirsty. Pulse and temperature normal. Child more content and much less irritable.

Treatment Equal parts of skimmed milk and water with extra sugar, sodium bicarbonate drinks.

Urine: Acetone double positive.

1:3:42: Very little sickness, cough a little troublesome, still thirsty.

Urine: Acetone double positive.

4:3:42 No sickness, very seldom coughs, appears well.

Treatment Non-fatty diet, skimmed milk, extra sugar, sodium bicarbonate, morning and night.

Urine: Acetone double positive.

There was no further sickness or cough, but acetone was present in the urine for the next three to four weeks, gradually getting less till by the end of the fourth week it was clear. The urine was examined fortnightly for the next two months but remained clear. When the acetone cleared from the urine /

urine the sodium bicarbonate was stopped. The mother was advised about diet and rest and Adexolin drops were advised.

Saw the child again on 3rd August, 1942.

The mother said the child had had several attacks since last I saw her, but she was able to treat them by keeping the child in bed and the sugar and sodium bicarbonate diet. The history was the same - developed a cough, always worse at night, heat spots, "hanging" and very tired, tongue coated, slight diarrhoea. This attack - usual history. Had now been sick three to four days and was getting worse; there was also slight diarrhoea, a watery motion five to six times each day.

3:8:42 The child lying very quietly in bed, very pale, heat spots now hardly visible, pulse and temperature normal, tongue coated, scattered ronchi in chest, no abdominal pain or tenderness.

Urine: Acetone triple positive, no other abnormalities.

Treatment Sips of sugar and water, sips of sodium bicarbonate and water.

4:8:42 Still being sick, coming on after the cough; the sodium bicarbonate sips staying down longer than the sugar. Pulse and temperature normal.

5:8:42 Sickness still the same, cough very troublesome /

troublesome, always followed by sickness. Vomited material being watery mucus usually slightly bile-stained towards the end of the attack.

Treatment Advised giving the sodium bicarbonate oftener and also sips of soda water.

6:8:42 Sickness better, no diarrhoea, the sick attacks only after cough. Pulse and temperature normal. Child taking more interest and is thirsty. Urine: Acetone triple positive.

Treatment Same: Kaolin poultice to back of chest.

7:8:42 Very little sickness, usually following bout of coughing.

Treatment Equal parts of skimmed milk and water, sodium bicarbonate.

8:8:42 Very little sickness, bowels moved twice, cough still troublesome at night often ending in sickness.

Treatment Same.

9:8:42 Keeping feeds down. Bowels not moved.

Treatment Skimmed milk and water equal parts, extra sugar, sodium bicarbonate.

Urine: Acetone double positive.

11:8:42 No sickness, very little cough, bowels moved.

13:8:42 No sickness, no cough, bowels moved four times.

Urine: Acetone double positive.

15:8:42 /

15:8:42 No sickness, no cough, diarrhoea still present. Pulse and temperature normal.

Urine: Acetone triple positive.

Treatment Same, advised pulv. cret. arom. c op. grains v t.i.d.

17:8:42 Diarrhoea still present; mainly watery mucus.

19:8:42 Bowels still moving nine to ten times per day.

Urine: Acetone triple positive.

21:8:42 Bowels moved five times mainly mucus.

23:8:42 Still same. Temperature normal, pulse normal, tongue slightly furred, no abdominal pain or tenderness, nothing abnormal felt in the abdomen. Child appears thinner, but general condition appears good.

25:8:42 Bowels still moving five to six times daily. Child still very thirsty.

Urine: Acetone triple positive.

Treatment Amount of sugar cut down in feeds, rusks and toast added.

27:8:42 Child taking its feeds well, but bowels still moving five to six times daily, much less mucus present.

Treatment Same.

1:9:42 Bowels still moving three to four times daily /

daily, very seldom during the night.

4:9:42 Bowels moving normally, still some mucus present.

Urine: Acetone double positive.

Treatment Ordinary diet, restricted fats, sodium bicarbonate night and morning. Difficulty in getting child to take sodium bicarbonate.

7:9:42 Child appears well, no sickness or diarrhoea.

Urine: Acetone positive.

The urine was not clear until 19-20:9:42.

The child's weight had fallen from twenty-six pounds to eighteen pounds. Following this attack I referred her to the Consulting Physician at Stirling Royal Infirmary. He said the case was one of cyclic vomiting, found nothing abnormal in the abdomen to account for the diarrhoea and told the mother she seemed to have treated her as well as he could. This advice to the mother certainly helped to reassure her and I noticed her changed attitude to the condition reacted favourably on the children.

The child, following this attack, progressed favourably and rapidly put on weight.

Since the last attack the mother states that the child gets attacks every three to four months but she can usually control them in three to four days by putting /

putting the child to bed and giving glucose and sodium bicarbonate. Between the attacks she takes a normal diet with restricted fats and flavoured glucose drinks night and morning.

I have examined the urine regularly but never found it completely free of acetone (I have changed the ammonia used in the test twice). The history is always the same - heat spots, restless at night, off food, goes pale, constipated; always wants to be "on the move". Treatment started at this stage usually prevents onset of sickness.

The mother has noticed that the heat spots are always nearly better before the sickness starts.

CASE 5 Eveline D.

First child of Mrs H. daughter of H.D.

(Illegitimate daughter of Mrs H. adopted by Mrs W.D.)

Born 7:10:42

Bottle fed; teething ten months; walking fourteen months; heat spots since six months.

10:10:43 Violent and incessant sickness.

History

Had had a bad attack of heat spots, very irritable, gone off food, "hanging", lost colour for past three to four days. There had been occasional slight sick attacks. Been sick all during night.

Examination

Child looks pale, very irritable and restless, had evidently lost weight, evidence of heat spots, no temperature, pulse normal, breath smelt strongly of acetone.

Urine: Acetone triple positive.

Treatment Sips of sugar and water, sips of sodium bicarbonate in water.

11:10:43 Sickness much less. Pulse and temperature normal.

Treatment Same.

12:10:43 No sickness, bowels moved twice.

Treatment Equal parts of skimmed milk and water, extra /

extra sugar and sodium bicarbonate.

Urine: Acetone double positive.

14:10:43 No sickness, taking food well.

16:10:43 Refusing food, slight diarrhoea, irritable.

Urine: Acetone triple positive.

17:10:43 Sickness following everything she takes, vomited material just what she has taken then a little bile-stained mucus and the vomiting stops until the following drink; is very thirsty.

Treatment Sips of sugar and water, sodium bicarbonate.

Urine: Acetone triple positive.

18:10:43 Drinks remaining down longer, fifteen to twenty minutes, no bile. No pulse or temperature, no abdominal tenderness; diarrhoea stopped.

19:10:43 No sickness, very thirsty, no diarrhoea.

Treatment Skimmed milk and water, extra sugar and sodium bicarbonate.

Urine: Acetone double positive.

Theserecurring attacks of sickness went on as above until the beginning of December. The urine cleared about ten days after the last of sickness.

The child had become very thin (the mother was afraid to bring the child to the Child Welfare to be weighed on account of the cold weather). During the rest of December and January, the child had a very good /

good appetite and rapidly regained weight.

Since that time she has had several threatened attacks, none, however, reached the sickness stage.

Immediately the mother sees the heat spots and the child pale, and "hanging" she puts her to bed, stops all fatty food, puts the child on skimmed milk with extra sugar and sodium bicarbonate drinks night and morning.

Examination of the urine at this stage shows acetone double positive clearing up in seven to ten days.

On this treatment the heat spots rapidly clear up and are not so itchy.

CASE 6 May B.

Daughter of Mrs B. daughter of H.D.

Born 26:3:42

Teething fourteen months; walking fourteen months; breast fed.

5:11:43 Incessant sickness.

History

Since two to three months old has been troubled with heat spots, attacks usually lasted about one week, during the attacks was very restless, not sleeping and off food. About a week ago had a bad attack of heat spots, "hanging", lost all colour and went off feeds. The mother noticed that for the past two to three days the child always wanted to be sitting on her chamber, the bowels did not move nor was she passing water, both of which appeared normal. Yesterday started vomiting after meals; the food remaining down five to ten minutes and then being vomited. After the vomiting the child seemed better and wanted more food which again was vomited.

To-day is being sick even without taking food; the sickness coming on every fifteen to thirty minutes.

Examination

Pulse slow, no temperature, evidence of heat spots now clearing, tongue furred, no abdominal tenderness /

tenderness, no evidence of vaginitis or rectal irritation. Child looks pale and doesn't appear irritable.

Urine: Acetone triple positive, No other abnormalities.

Treatment Sips of sugar and water, sips of sodium bicarbonate and water.

6:11:43 Had no sickness since early morning. Still apparent vaginal irritation. Pulse and temperature normal.

7:11:43 Child much better, no sickness, hungry, wants out of bed.

Treatment Skimmed milk and water equal parts, extra sugar, sodium bicarbonate drinks morning and night.

8:11:43 Urine: Acetone double positive. No other abnormalities.

11:11:43 Child very well, taking food, very active, apparent vaginitis gone, pulse and temperature normal, bowels moving regularly, tongue clean.

Advised mother on the condition and regarding diet, adequate rest and attention to the teeth, and to look for the early signs.

Urine: Acetone a trace.

Urine cleared up within one week, was still clear two weeks afterwards.

9:12:43 "Hanging", pale, off food, heat spots, running /

running nose, been sick after last two feeds, vaginal irritation not evident.

Urine: Acetone triple positive.

Examination

Pulse and temperature normal, child pale, a little irritable, bowels not moved for two days, watery mucous discharge from the nose, no abdominal tenderness, tongue slightly furred.

Treatment

The mother had put the child on sugar and water with sips of sodium bicarbonate and water, and the child was in bed.

10:12:43 Was sick once during the night, took some sodium bicarbonate and water and went to sleep; has not been sick since. Bowels moved.

11:12:43 No further sickness, child very thirsty, nose still running a little; bowels moved.

Urine: Acetone positive.

Treatment Skimmed milk, non-fatty foods, extra sugar, sodium bicarbonate drinks night and morning.

15:12:43 Urine: Acetone a trace.

She had a similar attack about one month afterwards and again an early sign was a running nose. The mother had noticed that the child was getting very nervous, flushing very easily and is always very active and not sleeping as much as she used to.

The /

The last time I saw her was on 24:2:43. She looked a typical child of the cyclic vomiting type - thin, pale, nervous, active and excitable child, bright eyed and flushing very easily, noticeable very easily against the usual pale skin.

W. D. FAMILY

W. D. Mrs M. H. Mrs S. H.

All others are abroad and as far as is known by W. D. (Sen.) they and their families are all healthy. There are nine in the family and all are alive and healthy. The mother died at thirty-six years of age.

W. D. (Jun.) Family

W. D. Twenty-one years of age. History of sick attacks in childhood usually lasting one to two days and then all right again. Was always a thin, wiry, nervous, excitable child, late in cutting teeth.

Attacks stopped about eight to nine years.

I. D. Nineteen years of age. History - always was healthy; teething nine to ten months. Is now married, has had one child. She is now a smallish plump girl, has a quiet retiring disposition, has always been very nervous. Her child died in Stirling Royal Infirmary of infantile eczema at one month.

F. D. Eighteen years of age. Healthy childhood, never had much illness. Mother does not remember when she cut her teeth. She is a tall thin girl, always been nervous, was very bright at school.

M. D. Fourteen years of age. See Case I.

W. D. Father of the above family is a small thin very nervous and excitable person. He is a foreman at his work and is called "Electric Willie". Has had artificial /

artificial teeth since he was seventeen to eighteen years of age.

Mrs D. is a sensible well-balanced person.

Mrs M. H. Family

Girl aged eight years, always been healthy. She looks a typical cyclic vomiting child - thin, pale, excitable child, suffers from heat spots. Teething ten months. Mother says she has always been very wiry.

Boy aged five years, healthy child. Teething ten months. Suffered from heat spots. Developed infantile paralysis at two years and four months.

Boy aged two years. Teething first three months, others late. Infantile eczema from three to seven months. History of heat spots since eczema.

Has developed attacks of cyclic vomiting since Thesis was prepared. Case 10 on Table I.

Mrs A. H. Family

Two children, both cut teeth eight to nine months, both suffer from heat spots. No history of sick attacks.

All the family of W.D. (Sen.) have artificial teeth.

H. D. (Brother of W.D. Sen.) FAMILY

(1)

W. D. Father of Cases 2a, 3a, 4a.

History given by his mother.

Was a very difficult child to rear from a very early age, he was troubled with sick attacks and on several occasions he appeared to be dying. He was bottle fed from birth and suffered from heat spots from about one month on. It was well over one year before he cut any teeth. She was advised by the doctor to feed him on white of egg, fruit juice and brandy at night to give him sips of whiskey to keep him sleeping. Later he was given one small teaspoonful of whiskey at night, when the sickness was on, and she noticed that if the whiskey stayed down and he slept he was usually much better in the morning. During his early childhood all kinds of patent foods were tried but none were any use. The local midwife advised her to put him on the milk of a special black and white cow. This milk was the only thing that agreed with him and he had very few attacks. The doctor advised the mother to get a feeding bottle with a long rubber tube attached and he brought a screw clip to put on the tubing and instructed her to tighten the screw when she noticed he was being sick or felt sick.

He remained a very difficult child to feed and when /

when he was taken out his father always carried a small bottle of whiskey and if he was sick or felt sick he was given repeated sips. This helped him. About the age of seven years the sick attacks left him and he improved rapidly.

Note This black and white cow in all probability was a "Fresian" and about this time this breed was noted for the very large amount of milk they gave but the milk was of a very low butter fat content. During the past fifteen to twenty years this breed has been improved and now their butter fat content is up to standard.

He is now a thin, pale, nervous type of man. He has had artificial teeth for a long time. He has not had his appendix removed.

(2)
Mrs B. Mother of Case 6a

Healthy child, always troubled with heat spots. Had her appendix removed while at school, no other serious illness. Has had artificial teeth since about seventeen years of age.

(3)
Mrs H. Mother of Case 5a.

History same as (2).

(4)
T. D. not married

History same as (2)

(5)
J. D. not married

From /

From about the age of three to four years he was troubled with sick attacks and acute abdominal pains. Following an attack of heat spots he would go off his food, have severe pains in his stomach followed by sickness which lasted two to three days. The condition was diagnosed as appendicitis, but he was not operated on. These attacks lasted off and on for several years.

He did not cut teeth until he was well over one year. He has had artificial upper teeth for a number of years.

(6)

Mrs B.

History same as (5)

The father (H.D.) states that Davis family get their teeth late and lose them early. He lost his when he was fifteen to sixteen years of age. He is a worrying excitable type of person.

CASE 7 C. N.

Born 12:1:35

Breast fed three to four months; teething twelve to twelve and a half months; walking eleven and a half months.

About the age of one and a half years was brought to the surgery because she was losing weight, had gone very pale, was off food and listless; she had a habit of sitting on the edge of a chair and rubbing up and down and appeared to be wanting to pass water but did not. She was occasionally sick after meals but no diarrhoea. The sickness when it came on was usually after the food had been down four to five minutes. After the vomiting stopped she seemed better and wanted more food.

Urine: Acetone double positive, no sugar or albumen.

There was no evidence of vaginal or rectal irritation; there were signs of heat spots which were clearing. She was a thin, small, very nervous child.

Treatment She was put off all fats, given skimmed milk and extra sugar.

There was no more sickness after that night and she rapidly gained weight. The urine was free of acetone by the following week.

The mother was advised regarding the condition.

3:4:38 /

3:4:38 Sickness for past two days.

Mother stated that she had had several mild attacks since last seen. She would have heat spots, that same pressing desire, off food, pale, become lazy and irritable. If she put her to bed and stopped all fats she was well again within three to four days. There had been no actual sickness.

History of present attack as usual, but she also had a lot of ulcers on her tongue. Her pulse and temperature were normal.

Urine: Acetone triple positive. No other abnormalities.

Treatment Put on sips of sugar and water. Dose of Milk of Magnesia.

3:4:38 Still being sick, bowels not moved. Pulse and temperature normal. Child very irritable and thirsty. No abdominal tenderness.

Treatment Sips of sugar and water, sips of sodium bicarbonate and water.

4:4:38 No sickness since early morning. Child sleeping.

Urine: Acetone double positive.

Treatment Same; dose of Milk of Magnesia.

5:4:38 No further sickness. Bowels moved.

Treatment Equal parts of skimmed milk and water, extra sugar.

7:4:38 /

7:4:38 No sickness, very hungry, bowels moving.

Urine: Acetone positive.

Treatment Allowed out of bed. Skimmed milk, extra sugar in form of jam, syrup, treacle. Sodium bicarbonate drinks morning and night.

14:4:38 Child well. Putting on weight.

Urine: Acetone a trace.

21:4:38 Child thriving.

Urine: Acetone a trace.

28:4:38 Urine clear.

She had a similar attack about four and a half years of age. In this case there was no evidence of pressing or ulcers on the tongue, but she developed very painful adenitis of the neck. She was sick for two to three days. At the time of the sickness the urine showed acetone triple positive, but no other abnormalities. She lost a lot of weight during this attack and the urine was not free of acetone until about one month afterwards. The painful glands were treated with Kaolin poultices and improved rapidly after the sickness stopped. Adexolin was also given. The father stated that he was worried about the attack coming on so often and wished the child to be seen by the late Dr MacLennan. He confirmed the diagnosis of cyclic vomiting, advised the same treatment and to make sure the child had adequate /

adequate rest.

About four and a half years she developed whooping cough, acetone was present in the urine during the attack varying from a trace to double positive.

In June 1941 she developed diphtheria and was removed to hospital. No acetone was said to have been found in the urine while she was in hospital.

7:11:42 Severe sickness for one day.

History

Had had heat spots, was very lazy, irritable, pale, off food, indefinite abdominal pains centred about the middle of the abdomen, constipated.

Examination

Pulse and temperature normal, tongue furred, abdominal tenderness about the umbilicus, no rigidity, evidence of heat spots which were now clearing. The child had been on sugar and water since morning.

Treatment

Sips of sugar and water and sodium bicarbonate and water.

Urine: Acetone triple positive. No other abnormalities.

8:11:42 Still violently sick, mainly watery bile-stained mucus. Temperature normal, pulse fast, abdomen still tender, no rigidity, bowels not moved.

Urine: /

Urine: Acetone triple positive.

Treatment Same.

Night visit - still being sick, attacks fewer, sleeping after sickness.

9:11:42 No sickness since early morning, very thirsty, pulse and temperature normal, no abdominal tenderness, bowels not moved.

10:11:42 No sickness, bowels moved, no abdominal tenderness, pulse and temperature normal.

Urine: Acetone double positive.

Treatment Equal parts of skimmed milk and water, sugar, sodium bicarbonate.

12:11:42 No sickness, child appears well, bowels moved.

14:11:42 No sickness.

Urine: Acetone double positive.

Treatment Non-fatty diet extra sugar, sodium bicarbonate drinks after meals.

18:11:42 Urine: Acetone positive.

25:11:42 Urine: Acetone a trace.

A trace of acetone was present in the urine for next three to four weeks.

On several occasions the mother brought along a sample of the urine when she noticed the early signs; it always showed acetone varying from positive to double positive. One to two days rest in /

in bed on non-fatty diet with sugar and sodium bicarbonate cleared it up in fourteen to twenty-one days. After the urine was clear she rapidly gained her appetite and appeared well.

She is still a nervous excitable child, small, thin, pale, bright-eyed, "doll-like" in appearance; flushes very easily and is rather timid. She is a marked contrast to her young brother who is a red faced plump boy.

Her father is of a nervous disposition with a fairly marked stammer. Her mother appears a normal type. Her father is one of a large family, is the only one married with a family.

I can get no history of similar attacks having been present in his family.

School attendance record:-

1939/40	160/17616.....	9%
1940/41	253/384130..36..	5%
1941/42	380/39212.....	3%
1942/43	389/41627.....	7%

CASE 8 R. S.

Born 7:10:36

Bottle fed; teething ten months; walking eleven and a half months.

25:11:36 Incessant sickness.

History

For the past seven to ten days he has been troubled with heat spots, went off his feeds. Occasional sickness after feeds, now being violently sick even when no feed has been given. The milk is vomited immediately it is taken, at other times it is mainly mucus which is being vomited, occasionally the mucus is bile-stained especially towards the end of the sickness.

Examination

Child apparently lost weight, appears drowsy, not fevered, pulse not fast, abdomen appears normal, bowels moving very little.

Treatment

Put on equal parts of milk and water with added sugar. One drop of Halibut Liver Oil night and morning.

26:11:36 Child still very sick, very restless, crying most of the time, had not slept. Little made out on examination, not fevered, pulse fast, no apparent abdominal tenderness, difficult to examine as /

as child cried all the time and was sick, vomiting up watery bile-stained mucus. Bowels not moved.

Treatment Barley water. Powders - Hyd. c. cret. grains $\frac{1}{4}$. Sodium bicarbonate grains iii. Pulv. rhei grains $\frac{1}{2}$, t.i.d.

27:11:36 8 a.m. Still violently sick, parents been up all night, pulse rapid, temperature low, losing weight rapidly, very pale, eyes sunken in head, bowels moved little during the night, child looks very ill.

Treatment Half strength saline, small dose of Milk of Magnesia.

Noon - no change, becoming very emaciated, abdomen hollow, pulse was rapid, no cough, strong smell of acetone in breath.

Treatment Sips of boiled water and sugar repeated half hourly.

7 p.m. Some sugar and water being retained, pulse still very rapid, temperature 100 degrees, respirations increased.

Treatment Same, alkali powders to be tried four hourly.

28:11:36 Child slept part of the night, very little sickness, sugar and water staying down, alkali powders usually being vomited. Bowels moved, temperature 99 degrees, pulse rapid, respirations much /

much slower, acetone still present in the breath.

Unable to get a sample of the urine.

Treatment Two to three ounces of sugar and water three to four hourly, alkali powders night and morning.

29:11:36 Child much better, no sickness, very thirsty, slept after feeds. Pulse still fast, temperature normal, respiration normal, bowels moved.

Treatment Skimmed milk and water, one to two parts, with added sugar, three hourly feeds, during day and to be continued during the night if awake. Sodium bicarbonate was to be given in place of powders; $\frac{1}{2}$ -teaspoonful to be dissolved in one pint of water, flavoured with orange, the child being allowed to take what it wanted, usually about two to three ounces. At this stage I found that the milk from a special T.T. cow had been kept for the child. This milk was more than half cream, and the mother said that after the cream had been taken off the milk was still better than some of the other unskimmed cows milk.

30:11:36 No sickness, child looks very contented, slept all night, bowels moving.

Treatment Skimmed milk and water two to three parts, extra sugar, sodium bicarbonate.

1:12:36 No sickness, general condition rapidly improving.

Treatment /

Treatment Same.

2:12:36 Child progressing.

Treatment Milk and water, equal parts, extra sugar, sodium bicarbonate.

3:12:36 Child progressing.

5:12:36 Child progressing.

Treatment Milk and water three to two parts, extra sugar, sodium bicarbonate stopped.

One drop Halibut Liver Oil at night.

9:12:36 Child progressing.

Treatment Same, Halibut Liver Oil night and morning.

12:12:36 Child progressing.

17:12:36 Child well.

Conditions explained to the mother; to be on the outlook for early signs.

5:4:37 Vomiting after food.

Has had heat spots for past four to five days, off feeds, pale, was very restless now "hanging" and sleepy. Had been very well since last illness.

Heat spots, pale, off food, vomiting all feeds.

Treatment Skimmed milk and water, one to two parts, extra sugar, sodium bicarbonate.

6:4:37 Urine: Acetone double positive. No other abnormalities.

7:4:37 Sickness stopped, heat spots hardly visible, thirsty.

Urine /

Urine: Acetone positive.

Treatment Same; rusks added.

10:4:37 Child taking feeds, appears well.

Treatment Non-fatty diet, skimmed milk, sodium bicarbonate at night.

Urine: Acetone a trace.

24:4:37 Child thriving.

Urine: Acetone clear.

1:4:38 Heat spots for the past week, "hanging", off food pale, developed cough, vomiting after cough, now vomiting immediately after food and after coughing. Mother states that he has been very well and had been walking since he cut his first teeth at ten to eleven months and has been very active.

Examination

Pulse and temperature normal, scattered heat spots, now nearly clear, tongue slightly coated, nothing abnormal in the chest.

Urine: Acetone triple positive. No other abnormalities.

Treatment Equal parts of skimmed milk and water, extra sugar, sodium bicarbonate.

2:4:38 Child much better, wants out of bed, had no sickness since early morning following a spasm of coughing, Cough still troublesome. Pulse and temperature normal.

Urine /

Urine: Acetone positive.

Treatment Non-fatty food, skimmed milk, extra sugar, sodium bicarbonate. To be allowed up for an hour in his play pen.

4:4:38 Very little cough, appetite good, appears well. Mother advised to see that he takes adequate rest.

Urine: Acetone a trace.

6:5:38 Urine: Clear.

17:5:38 Night - has been at his grandmother's for the afternoon, has been violently sick since he came home. No history of heat spots, has been very active for the past two to three days and a little pale. Mother thinks he was eating chocolate.

Examination

Child is pale, temperature and pulse normal, no abdominal tenderness, bowels not moved to-day. The vomited material is mainly bile-stained mucus.

Treatment Dose of Milk of Magnesia, sips of sugar and water.

18:5:39 Urine: Acetone triple positive.

Still being sick, temperature and pulse normal, bowels moved.

Treatment Equal parts of skimmed milk and water, sugar, sodium bicarbonate.

19:5:38 Still being sick, developed cough, bowels not /

not moved. Pulse and temperature normal. No abdominal pain.

Treatment Same.

Night - still very sick.

Treatment Sugar and water, sodium bicarbonate.

20:5:38 Sickness stopped during the night, child appears much better. Wants out of bed. Very little cough.

Urine: Acetone positive.

22:5:38 No sickness, no cough. Child very bright.

27:5:38 Urine: clear.

He had a similar attack in August and another about Christmas.

He is an only child, has always been thin, pale and nervous. He is very active, very keen on mechanical toys, and takes a keen interest in what is going on on the farm.

His parents are farmers. His mother is a quiet sensible person, his father is nervous and inclined to be neurotic. He seems to be quite bright at school. His father is a member of a large family.

CASE 9 M. S.

Born 25:12:36

Breast fed; teething nine to ten months; walking fourteen months. Has suffered from heat spots since ten to eleven months.

3:11:38 Had had a bad attack of heat spots, very fretful, off colour, off food, irritating cough.

Pulse and temperature normal, nothing abnormal found in the chest.

Treatment Sedative cough mixture, to be kept in bed.

4:11:38 Cough still very irritable, especially at night. Pulse and temperature normal.

6:11:38 Cough still troublesome, often followed by sickness, following sickness cough stops for several hours. Pulse and temperature normal. Nothing abnormal found in the chest.

8:11:38 Cough much better, no sickness.

10:11:38 Very little cough, no sickness.

The child was never fevered when I examined her, but the mother said she was often very hot at night and would persist in throwing the blankets off at night and she was sure it was due to the heat spots.

14:11:38 Keeping well, still in bed, appetite better.

17:11:38 Cough and sickness returned. Pulse and temperature normal. Chest clear.

21:11:38 /

21:11:38 Cough still troublesome at night with occasional sickness.

27:11:38 Still coughing at night, no sickness.

3:12:38 Coughing very little, taking food well, colour better. Diagnosed as bronchial catarrh. Urine was not examined for acetone.

21:6:40 Heat spots been troubling, off food, pale, appears very tired, irritable, cough troublesome at night. Since last attack she had been keeping well, had repeated attacks of heat spots, is always very nervous and is keeping very thin. She is constipated usually worse after the heat spots.

Examination

Pulse is fast, temperature 99 degrees, tongue furred, very nervous, flushes very easily. Nothing found in the chest.

Treatment

Dose of Milk of Magnesia, sedative cough mixture.

22:6:40 Cough still troublesome at night. Pulse and temperature normal. Bowels moved.

26:6:40 Cough still a little troublesome at night with occasional sickness.

3:7:40 Appears very well, taking her food and very active, bowels moving regularly.

2:10:40 Heat spots, off food, pale, felt very tired /

tired, now being very sick. The mother said that she had noticed the child felt faintish after she took solid food. Has had a bad chill for three to four days. The sickness began first after a spasm of coughing during the night, now being incessantly sick, the sickness coming on every half hour or so. If she takes anything she is immediately sick and vomits up what she has taken, other times it is mainly mucus, sometimes bile-stained. After the vomiting she seems to get relief and lies very quietly until the next attack comes on. She knows when the attack is coming on and gets very excited. Bowels moved a little yesterday but not to-day.

Examination

Very thin, pale child, very nervous. Temperature is normal, pulse between attacks is normal, during and following an attack the pulse becomes rapid. The tongue is slightly coated, she does not appear to have any abdominal pain. During and after the sickness she was flushed and then became pale again. During and after the sickness she felt very faintish, was afraid to move in bed as it made her feel faint and sick. Nothing abnormal found in the chest. The breast smelt strongly of acetone. Urine: Acetone triple positive, trace of albumen, no sugar.

2:10:40 /

2:10:40 Night - still being sick incessantly, child looked ill, cough still very troublesome.

Treatment Sips of sugar and water, sips of sodium bicarbonate and water.

3:10:40 Sickness stopped during the night, very thirsty and hungry. Pulse and temperature normal, coughed very little this morning. Bowels not moved.

Treatment Sips of skimmed milk and water, extra sugar, sodium bicarbonate, dose of Milk of Magnesia.

4:10:40. Very bright, playing with her toys, wants out of bed, bowels moved, pulse and temperature normal, very little cough.

Urine: Acetone double positive, no albumen, no sugar.

Treatment Dilute skimmed milk, non-fatty foods, extra sugar in form of jam, syrup, treacle in place of butter which she is very fond of. Sodium bicarbonate drinks morning and night.

Condition diagnosed as cyclic vomiting; mother advised about condition, early signs especially heat spots which always seemed to be the first indication of the condition and cough. Fatty foods, especially butter was to be restricted and adequate rest must be given.

10:10:40 Child appears well, taking food well, sleeping well at night, bowels moving but requires to take the Magnesia at night.

Urine : /

Urine: Acetone positive.

13:10:40 Urine: Acetone Positive.

The urine was examined weekly and showed acetone present, varying from a trace to a distinct positive, until the end of the second month when it cleared.

2:2:41 Very bad attack of heat spots, developed night cough, off food, gone very pale, feeling faintish, has fainted two or three times when she was excited, very constipated, sick feeling when offered food, no actual sickness. Pulse and temperature normal, tongue furred, no abdominal pains, feels sick and faint when she sits up in bed.

Treatment Stop all fat, including milk, dose of Milk of Magnesia, sodium bicarbonate.

3:2:41 Urine: Acetone double positive. No other abnormalities.

4:2:41 Cough very troublesome especially at night. No bowels moved. Pulse and temperature normal, very nervous and appears tired and sleepy.

Urine: Acetone double positive.

6:2:41 Cough very troublesome, especially at night, now being sick after coughing. Mother stated that the child feels hot and feverish before the sick attacks.

Treatment Sugar and water, sodium bicarbonate.

7:2:41 Urine: Acetone double positive.

8:2:41 /

8:2:41 Sickness much better, once during the night, none since. Cough very annoying.

Treatment Advised a Kaolin poultice to the back at night.

9:2:41 Urine: Acetone double positive.

10:2:41 Appeared better, very little cough.

Treatment Gamgee jacket in place of Kaolin poultice. Equal parts of skimmed milk and water, sugar, sodium bicarbonate.

Urine: Acetone double positive.

13:2:41 Very little cough, sleeping well at night, feeling very hungry. Constipated.

Urine: Acetone double positive.

Treatment Non-fatty diet, skimmed milk, extra sugar, sodium bicarbonate. Dose of Milk of Magnesia night and morning.

17:2:41 Progressing, taking food well, bowels moving.

Urine: Acetone double positive.

Treatment Same.

19:2:41 Cough returned, was sick twice during the night, has been very restless, feels faintish.

Complaining of a sore throat.

Examination

She is lying very quietly in bed, afraid to move, tongue furred, temperature 100 degrees. Pulse rapid, multiple /

multiple tender glands on both sides of the neck. Throat appears a little inflamed. Further examination of the throat caused her to be sick. She vomited some bile-stained watery mucus and complained of abdominal pains. The vomiting made her feel faintish and the pulse was very rapid and soft. There was no abdominal tenderness. She seemed exhausted, face flushed. After fifteen minutes the pulse slowed down, face became pale again and she lay very quietly in bed.

Treatment Kaolin poultice to back and neck. Put back on sugar and water and sodium bicarbonate.

Urine: Acetone triple positive.

20:2:41 Child had a bad night; being sick every half hour and always feeling sick and faintish. The sugar and water not being kept down, sodium bicarbonate occasionally staying down ten to twenty minutes then being vomited. Cough still very troublesome ending in being sick. After cough stops she feels better. She is very thirsty.

Examination

She looks "all out". Glands in the neck still tender. Temperature 99.8 degrees, pulse rapid.

(Mother states that the child was eating cheese on 18:2:41)

Treatment Same.

Urine: /



Urine: Acetone triple positive.

21:2:41 No change, general condition deteriorating rapidly. Afraid to move. Looking very ill, eyes sunken, face very pale, respirations rapid, temperature 98 degrees, pulse very rapid.

Treatment Sips of sodium bicarbonate alternately sugar and water. Kaolin poultices to back and neck.

Night visit - same.

22:2:41 Sickness less, only after coughing which is still very troublesome. Is keeping the fluids down longer. No sickness between coughing. Pulse very rapid, temperature 99 degrees, respirations still fast. Strong smell of acetone in the room.

Treatment Same.

Urine: Acetone triple positive.

24:2:41 No sickness, intermittent cough, feeling better, glands still tender. Pulse and temperature normal.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate.

25:2:41 Progressing, very little cough, sitting up playing with her toys.

Urine: Acetone double positive.

Treatment Same.

26:2:41 Progressing, very seldom coughs, very hungry.

Treatment /

Treatment Skimmed milk, toast, biscuits, Adexolin.

27:2:41 No sickness, no cough, glands in neck not tender, very hungry.

Treatment Light non-fatty diet, sugar and sodium bicarbonate.

28:2:41 Appears well, very pale, bowels moving, only having the Magnesia at night.

Urine: Acetone double positive.

Treatment Same.

2:3:41 Appears very well, glands in neck receding, appetite good. Wants out of bed.

Treatment Same; allowed more solid food, skimmed milk, extra sugar, sodium bicarbonate, Magnesia at night.

Urine: Acetone double positive.

5:3:41 Appears well, still very thin and pale, putting on weight, glands in the neck hardly felt and not tender, still very easily tired when out of bed.

Treatment Normal diet with restricted fats; jam, honey, syrup or treacle to be given in place of butter. Sodium bicarbonate drinks night and morning.

Urine: Acetone double positive.

10:3:41 Progressing, putting on weight, becoming very active and bright. Urine: Acetone double positive

Treatment Same; adequate rest.

Acetone was present in the urine during the next seven weeks then cleared. The sodium bicarbonate was stopped. During the next two months no acetone was /

was found in the urine. The child was very well, still thin, pale and excitable.

She had a similar attack just before the Easter holidays in 1942.

History

Very excitable and always wants to be on the move, heat spots, pale, fretful, off food, irritating cough, worse at night, feeling faintish after food and when excited. Sickness, first at night following the cough, then following food, then coming on even with turning in bed. Glands in the neck enlarged and painful. Put on sugar and sodium bicarbonate. Sickness stopped on third day, at the same time the glands ceased to be painful and began to recede. Cough persisted for week.

Urine: Acetone triple positive for four days, nearly clear by the third week, clear by the end of the fourth week.

(Mother stated that the child had been eating chips on the way home from school for about a week before the attack and was not able to take her tea when she got home.)

Similar attack in the middle of December, 1943.

History

Early symptoms same, sickness lasted one night and one day, cough lasted seven to ten days, glands enlarged /

enlarged and painful, cleared up on the fourth to fifth day. Acetone triple positive. Urine clear by the end of the third week.

The mother stated that as long as she could keep her from getting over-excited or over-tired and limited the amount of fat she could usually control the attack before the sickness started, if the cough could be stopped within three to four days then there was no sickness.

General Appearance

She is a thin, excitable, pale, bright-eyed shy child. Very typical of that "doll-like" type usually found in cyclic vomiting. When well she is very active; even though she lost a lot of time at school, she does very well in her class.

Her parents are well-to-do farmers on both sides. She is an only child, her parents having married late in life. Her mother is of the thin worrying type. Her father is rather stolid. Both parents are members of very large families. There is no history of cyclic vomiting in either family.

One cousin, a boy, only child, suffers from repeated attacks of heat spots with acetone double positive, present in the urine during the attacks. Heat spots and urine clear up on reduced fatty diet, extra sugar and sodium bicarbonate. When this child was eighteen and a half months old he developed an acute /

acute otitis media, during the attack and for the following two to three weeks after had acetone present in the urine - the urine cleared when the ear healed up.

He is of the cyclic vomiting type, thin, pale, nervous type, flushes very easily, suffers from repeated attacks of heat spots, is bright at school and always very active. Was ten months old before he cut his first tooth.

CASE 10b. G. B.

Born 27:7:30

Breast fed three months; teething thirteen months; walking twelve months.

History

Repeated attacks of sickness for the past two years, attacks lasting two to three days, but lately the attacks have been lasting longer, three to four days actual sickness. The condition had been diagnosed as a gastric upset due to teething. Urine had never been examined. He gets pale, irritable, jumpy and off food for two to three days. The sickness then starts, first his feeds are vomited, then he becomes sick even without taking food, barley water and even sips of boiled water being immediately vomited. The vomited material is bile-stained "glut". Once the vomiting stops he seems very much easier, very thirsty, the vomiting may stop for a half to one hour if nothing is given but even a very small drink of water will start the vomiting again. Usually early in the attack he becomes constipated but occasionally he has a mild diarrhoea.

28:11:33

Examination

He is a small, pale, very nervous child, very thin with large bright eyes - the general appearance of the cyclic vomiting child - "doll-like" or "small edition"/

edition" appearance.

His pulse and temperature are normal, his tongue is furred, he does not appear to have any abdominal tenderness, abdominal palpation caused him to be sick; almost immediately I began to palpate his abdomen he became very restless and it was evident he was going to be sick, after some retching he vomited a little bile-stained watery mucus, settled down in bed and seemed much easier. During the vomiting his face was flushed and his pulse was rapid, both passed off soon after the vomiting stopped.

His bowels had been regular until the last two to three days but had not moved since.

There was no history of heat spots.

The condition was diagnosed as cyclic vomiting and he was put on sips of sugar and water and alternately sodium bicarbonate (grains v to ounce i water).

29:11:33 Urine: Acetone triple positive. No other abnormalities. Fluids staying down if kept to two to three teaspoonfuls at a time and given slowly. Has only been sick three times in each case the food had remained down but was vomited immediately the next feed was started. His temperature and /

and pulse normal, no abdominal tenderness, bowels had not moved.

Treatment Same; dose of Milk of Magnesia to be given at night.

30:11:33 No sickness, bowels moved, no abdominal tenderness.

Treatment Equal parts of skimmed milk and water, extra sugar, sodium bicarbonate grains v four hourly. Dose of Milk of Magnesia at night.

1:12:33 Urine: Acetone double positive, no sickness, bowels moved.

Treatment Toast, biscuits added.

6:12:33 Urine: Acetone a trace.

Mother advised on the condition and treatment, to be on the outlook for the early symptoms, to avoid over-exertion and to attend to the teeth.

19:12:33 Urine clear, sodium bicarbonate stopped.

Treatment Put on Ferri et Ammon. Citras grains iii, t.i.d.

22:12:33 Child off food, constipated, no sickness, no heat spots, very irritable. (Had had half a fried egg for breakfast on 20:12:33, no other change in diet.)

Urine: Acetone double positive. No other abnormalities.

Treatment Equal parts of skimmed milk and water, extra /

extra sugar, sodium bicarbonate grains v four hourly, dose of Milk of Magnesia, to be kept in bed.

24:12:33 Urine: Acetone positive.

Child much more content and hungry. No sickness, bowels moved.

Treatment Non-fatty diet, sodium bicarbonate.

26:12:33 Urine: Acetone positive.

Child out of bed playing with his toys, taking food well, no sickness.

4:1:34 Urine: clear.

Treatment Halibut Liver Oil drops to be given thrice daily on loaf sugar.

28:6:34 Has been very well since last attack, been on ordinary diet for the past two months. Two days ago he had his finger squeezed in a door. He was given a dose of Castor Oil and put to bed. The following day he was off food and last night he started being violently sick. Bowels moved following his Castor Oil. Everything he takes is causing sickness. Pulse fast, temperature normal, no abdominal tenderness. Left index finger swollen and discoloured, no evidence of bone damage.

Treatment Sugar and sodium bicarbonate drinks.

29:6:34 Urine: Acetone triple positive. No other abnormalities.

Sickness still present but less frequent.

Sodium /

Sodium bicarbonate drinks seem to agree better than the sugar ones.

30:6:34 Slept all night till 5 a.m. Fluids staying down, bowels not moved, pulse and temperature normal. Finger better, not painful to handle, able to bend it; very nervous.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate. Dose of Milk of Magnesia.

2:7:34 Urine: Acetone positive.

Child out of bed, finger discoloured but he is using it freely. No sickness, bowels moved, very hungry.

Treatment Usual diet, reduced fats, sugar, sodium bicarbonate.

5:7:34 Urine: Acetone a trace.

Child appears well, appetite good.

9:7:34 Urine: clear.

10:8:34 Pale, irritable for the past two to three days, no sickness but feeling sick, off food.

He had been at friends' home on Sunday (5:8:34). Mother does not think he had anything unusual to eat, but he was playing with other children all afternoon, was late in getting to bed and did not sleep well; he seemed all right on Monday and Tuesday but later "fell away".

Treatment Non-fatty diet, $\frac{1}{4}$ teaspoonful of sodium bicarbonate /

bicarbonate four hourly.

11:8:34 Urine: Acetone double positive.

13:8:34 Urine: Acetone a trace.

Feeling better, appetite returned.

Treatment Reduced fatty diet, extra sugar, sodium bicarbonate.

20:8:34 Urine clear.

Treatment Ordinary diet, avoid too many fats.

Stop sodium bicarbonate. See that child does not over-excite or over-tire himself.

He had recurrences on:-

16:10:34....No sickness.....Urine clear by 26:10:34
30:1:35....Sickness one day.Urine clear by 14:2:35
1:9:35....Sickness one day.Urine clear by 8:9:35
13:12:35....No sickness.....Urine clear by 18:12:35

20:2:36

History

Has been very well since last attack. Got very wet coming from school on Monday; was hot and feverish on Tuesday morning and was kept in bed; at night he developed a cough which often caused him to be sick; was very sick all day yesterday and cough very annoying.

Examination

Child flushed and very irritable. Temperature 100.4 degrees, pulse rapid, abdomen not tender, examination of the chest impossible as the child cried and was very irritable and sick. Respirations not increased; bowels moved.

Treatment /

Treatment Sugar and sodium bicarbonate drinks,
Kaolin poultice to back of the chest. Mist. Opii.
Camph. Co. and Syr. Scill.

21:2:36 Urine: Albumen a trace. Acetone triple
positive.

Sickness still very troublesome coming on after
an attack of coughing. After the sickness stopped
the cough stopped and he was able to keep down some
of the fluid. There was no sickness between the
spasms of coughing. Temperature 100 degrees, pulse
fast, breath rate 26-28.

Treatment Same.

22:2:36 Slept better, coughing much less but still
ending in sickness. Generally child much more
content. Temperature 98.8, pulse fast. Breath
sounds harsh, no adventitious sounds, no dullness.

24:2:36 Urine: Albumen a trace. Acetone double
positive.

Very little cough, no sickness since yesterday.
Appears much better but is pale. Temperature 98
degrees, pulse normal, bowels moved.

Treatment Equal parts of skimmed milk and water,
sugar and sodium bicarbonate. Kaolin poultice
stopped.

27:2:36 Urine: Albumen clear. Acetone positive.
No cough, no sickness, pulse and temperature normal.
Allowed /

Allowed out of bed.

Treatment Non-fatty diet, skimmed milk, sugar, sodium bicarbonate.

2:3:36 Urine: No albumen. Acetone a trace.

Appears well.

11:3:36 Urine: clear.

Treatment Ordinary diet, restricted fats, extra sugar (syrup, treacle, jam), Adexolin. Sodium bicarbonate stopped.

18:3:36 Urine: clear.

Child appears well. Child back at school.

Further History

25:9:36 Sickness one day.

Urine: Acetone double positive, clear tenth day.

16:10:36 Early signs.

Urine: Acetone double positive, clear tenth day.

10:3:37 Early signs.

Urine: Acetone double positive, clear tenth day.

20:5:37 Sickness two days.

Urine: Acetone triple positive, clear twenty-first day.

11:2:38 Sickness one day.

Urine: Acetone double positive, clear fourteenth day.

26:5:38

10:5:39 Urine examined. No Acetone.

29:9:39 Early symptoms, no sickness.

Urine /

Urine: Acetone double positive, clear tenth day. Child had had one to two days treatment usually before I examined urine.

3:4:40 Developed sickness and diarrhoea and enlarged glands in the neck. Under the usual treatment the sickness stopped on the third to fourth day; acetone was present in the urine, never in excess but persisted with the diarrhoea. The temperature and pulse remained normal. Child lost a lot of weight. About the end of the second week he developed tenderness in both iliac fossae and enlarged tender glands could be felt. He was notified to the Tuberculosis Officer and he was moved to hospital.

Since he returned home he has kept well. He is still thin, nervous and easily excitable.

There is a family history of tuberculosis on the father's side.

His father works at a pit. He has scars on his neck from old discharging tuberculous glands. He is one of a large family. There is no history of recurrent vomiting in any member of his family.

His mother states that she suffered a lot from sickness when she was young. Her sister's daughter's children suffer from cyclic vomiting. (Cases 12b and 13b). Mother is a member of a very large family.

CASE 11b R. B.Born 9:10:39

Breast fed three months; teething ten months; walking ten months.

14:8:40 Child being repeatedly and violently sick. Mother thought it was due to his teeth. She did not associate it with the attacks the older child suffered from. He had been off his bottle for two to three days, was very irritable and not sleeping, always dribbling saliva, and the teeth were showing through the lower gum. The first she noticed was that his colour had gone, not finishing his bottle, being sick after his feeds, the sickness getting worse, now everything he took being vomited. Bowels not moved.

Examination

Thin, pale, bright-eyed baby, very restless and irritable; no signs of heat spots. Temperature and pulse normal. No abdominal rigidity. Breath smelt of acetone. Child was sick during examination, vomited up watery slightly bile-stained mucus. Seemed "done" after the vomiting.

Treatment

Sips of sugar and water, sips of sodium bicarbonate and water. Dose of Milk of Magnesia.

15:8:40 Urine: Acetone triple positive. No other /

other abnormalities. Condition same.

16:8:40 Still being sick, more of a dry sickness, the fluids keeping down longer. When the attack did end in vomiting it was watery mucus that was vomited. The abdomen feels soft. The child appears tired and had slept the greater part of the night. No smell of acetone in the breath.

Treatment Same.

18:8:40 No sickness, bowels moved, child appears very thirsty.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate.

19:8:40 Urine: Acetone double positive.

22:8:40 No sickness, two lower incisor teeth through, bowels moving, child appears much better.

Treatment Same, toasted crusts added.

29:8:40 Urine: Faint trace of acetone.

Treatment Ordinary diet, skimmed milk to be used in place of milk. Sodium bicarbonate stopped.

5:9:40 Urine clear. Child appears well and thriving.

Mother advised on the condition and its treatment.

From that time on he had recurring attacks, the majority of which the mother treated herself. She said she could be sure of him going off his food with /

with sometimes one and very occasionally two days sickness if he got very excited or had a lot of visitors or was taken out to friends where there were other children. He kept very thin and nervous. During these attacks the mother often brought a sample of urine and it showed acetone varying from a trace to double positive. Rest in bed, sugar and water, sodium bicarbonate always cleared up the attack in two or three days.

Early in 1942 he developed a severe attack. He had the same early symptoms; off food, pale, tongue furred, constipated, not sleeping well, tired and fretful followed by sickness. I saw the child on the third day of the sickness. Sugar and water and sodium bicarbonate and water sometimes would stay down an hour or so but was usually vomited immediately he took it.

On the first day he started having diarrhoea. He had no temperature, his pulse a little fast, he had no abdominal pain or tenderness, he was pale and thin but did not look ill. The sickness and diarrhoea persisted for a further three days and then stopped. The urine all this time was loaded with acetone and his breath smelt of it. Two days afterwards he started being sick again although the diet had not been changed. The following day the diarrhoea /

diarrhoea started again. The pulse and temperature were normal, there was no abdominal tenderness or rigidity.

The urine remained loaded with acetone.

The sickness and diarrhoea would stop again after one to three days. He was put on equal parts of skimmed milk and water, sugar and sodium bicarbonate and he seemed to be getting better, again to be followed by sickness and diarrhoea. I tried various ways of feeding him - stopping the sugar and only giving the sodium bicarbonate, stopping the sodium bicarbonate and only giving sugar; tried half strength saline, pulv. cret. aromat. c. opii. Nothing seemed to help. He still had the same sequence of sickness and diarrhoea for one to three days followed by two to three days free from sickness and diarrhoea.

This condition went on for four weeks and during one of the attacks he passed a round worm between five and six inches long. That same day the sickness stopped and the following day the diarrhoea stopped. The urine was still loaded with acetone. He had become very thin and very pale-faced.

By the end of a week the acetone was positive, by the end of the following week the urine was clear. He /

He improved rapidly after this. No further signs of round worm have since been found.

In November 1942 he developed tuberculous glands in his neck. They persisted for three to four months then gradually receded. No acetone was found in his urine at this time. Since that time he has kept free from any bad attacks.

On 28th March, 1944 I attended him for an attack with sickness but no diarrhoea. The sickness lasted two days and cleared up with the usual treatment. During the sickness the urine was triple positive, clearing by the 11th April, 1944.

He is typical of the cyclic vomiting child. Still small, thin, nervous bright-eyed child, always very active.

He is a brother of case 10b.

CASE 12b J. McW.

Born 6:6:36

Bottle fed; teething nine months; walking fourteen months.

History

She has always been a thin, small, very excitable child. Since birth she has been difficult to feed and numerous different feeds have been tried; they would agree with her for a bit and then she would "go off" them. She would appear to be agreeing with the food, after two to three months she would go off her food for one to two days followed by one to two days sickness then appear well again. During the sick attacks she vomited all her feeds. In the early stages a little was vomited at the end of the feed. This rapidly got worse until the whole feed was vomited. During these attacks she seemed very hungry and took her feeds very hurriedly. After the vomiting stopped she improved quickly.

About two and a half years of age I attended her for scarlet fever; she was sent to hospital but was kept in only one week and sent home as not being scarlet fever. I saw her again three days after she came home when she was peeling. About the end of the fourth week she developed a severe attack of sickness /

sickness and the breath smelt of acetone.

I was given the above history.

27:1:39

Examination

Hands and feet were still peeling, pulse and temperature normal, tongue furred, no abdominal tenderness.

Treatment

Sips of equal parts sugar and water and alternately sodium bicarbonate water.

Urine: Acetone triple positive. No other abnormalities.

28:1:39

Sickness still same. Child very irritable and restless. Bowels not moved. Pulse and temperature normal. The vomited material is often bile-stained just before the sickness stops.

Treatment Same. Dose of Milk of Magnesia.

29:1:39

Slept greater part of the night, some of the feeds staying down, bowels moved four times since early morning.

Urine: Acetone triple positive.

Treatment Same.

30:1:39

Sickness much less but diarrhoea worse. Is very thirsty. Pulse and temperature normal. No abdominal tenderness.

Treatment Same.

31:1:39

No sickness, bowels moved three times during /

during the night but have not moved since (9.45 a.m.).
Appears much more content.

Treatment Same.

Urine: Acetone triple positive.

1:2:39 No sickness, no diarrhoea, child very
hungry.

Treatment Equal parts of skimmed milk and water,
sodium bicarbonate.

2:2:39 No sickness, bowels not moved. Appears
well.

Treatment Same.

Urine: Acetone double positive.

3:2:39 No sickness, bowels moved.

Treatment Non-fatty diet, skimmed milk, extra
sugar, sodium bicarbonate.

5:2:39 Keeping well.

7:2:39 Urine: Acetone double positive.

Treatment Same.

10:2:39 Urine: Acetone positive.

13:2:39 Urine: Acetone positive.

17:2:39 Urine: Acetone a trace.

The sodium bicarbonate drinks were stopped.

23:2:39 Child well. Urine: clear.

1:3:39 Urine: clear

Condition explained to the mother.

For /

For the next two and a half years she had similar attacks every three or four months. The history was usually the same - after a day or so of increased excitability and restlessness she would go off her food, get pale, irritable and tired, there was never any history of heat spots, then the sickness started and if not controlled by the second day she would develop diarrhoea which lasted for a further one to two days then cleared up and then she would rapidly improve. In all these attacks the urine showed acetone present which cleared up in seven to ten days after the diarrhoea stopped. Since going to school she has had no further attacks. Her appearance was and still is typical of the cyclic vomiting child - small, thin, pale, very nervous child, flushing very easily, always on the move when well and going down rapidly during the attacks, very typical of the "doll-like" or "small edition" child.

Her grandmother states that her mother suffered from similar attacks when she was a child.

Her mother is rather a sensible type not given to excitement. She has only one sister but several stepbrothers and sisters. Her sister has one child who was operated on for pyloric stenosis when he was nine days old. There is no history of cyclic vomiting in this child.

The /

The father is a miner. He has three brothers and one sister. There is no history of cyclic vomiting in any of their families. They live in a room and kitchen which is kept very clean. The children are all very well cared for and attended to.

CASE 13b D. McM.

Born 18:9:43

Breast fed six months; still no teeth; not walking. At birth he weighed nine and a half pounds and seemed a very healthy baby. When he was a little over one month old he started having attacks of vomiting after meals and it was found that during these attacks there was acetone in the urine and that between attacks the urine was clear. There were no other abnormalities in the urine. The sick attacks usually lasted one to two days then stopped. He did not vomit after all his meals and the vomiting was always during the day usually vomiting two or three of his day feeds. He never vomited during the night. The feed was vomited immediately it was taken; at other times it stayed down and he seemed all right. The mother stated that he had been constipated since he was born and that before the sick attacks the constipation got worse. There were no other preliminary signs; he did not suffer from heat spots. He was failing to gain weight. On 6:10:43 he was ten pounds fifteen ounces, on 20:10:43 he was ten pounds six ounces. During the sick attacks the acetone was triple positive and would remain so for one to two days after the sickness stopped, then gradually clear up and be clear by the end of the second or third week.

The /

The treatment was to stop each alternate breast fed and give sugar and water and between feeds to give sodium bicarbonate and water. This was kept up until the urine was free from acetone.

On 9:2:44 he had a similar attack and this time it was noticed that his right eye watered before the sickness started and that during the sickness, which lasted two days, pus was coming from the right tear duct. This discharge persisted for about a fortnight and by the time the urine was free from acetone the eye was back to normal. At the beginning of this attack his weight was thirteen pounds fourteen ounces and by the time the acetone cleared on 23:2:44 his weight was fourteen pounds three ounces.

He was weighed again on 8:3:44 and was fourteen pounds nine ounces.

It was decided to put him off the breast and put him on national dried milk with extra sugar. This food seemed to agree with him and by 22:3:44 he was fifteen pounds eleven and a half ounces. On 5:4:44 he was seventeen pounds five ounces.

His mother stated that he had been off his food since yesterday, was constipated and that his right eye was running. He was pale, tired looking, pale very quietly on the scales, which was not his usual, his pulse and temperature were normal and there seemed nothing much wrong with him. Examination of the /

the urine that night showed acetone triple positive, no other abnormalities. By morning he was being violently sick and his eye was discharging pus. He was put on sugar and sodium bicarbonate and a dose of Milk of Magnesia.

7:4:44 Still being sick, vomiting up watery mucus which was sometimes bile-stained. Pulse and temperature normal, no abdominal tenderness. Eye still discharging from the right tear duct.

8:4:44 No sickness during the night but has been sick three times this morning, bowels moved during the night, appeared normal.

Urine: Acetone triple positive.

Treatment Same.

9:4:44 No sickness during the night. Was sick after his first feed at 6 a.m., has not been sick since. Bowels moved. Eye still discharging.

Treatment Same.

Night visit - sickness started after his 5 p.m. feed and was vomiting everything he took. Mother stated that when he was sick there seemed to be a lot of "wind".

Treatment Given a little sodium bicarbonate and put in the room with the blinds drawn and the house to be kept quiet. I saw him later that night and was told that he had slept since. Advised feed of sodium bicarbonate and water if he woke.

10:4:44 /

10:4:44 No sickness, very thirsty (won't let go his bottle until it is empty). Eye still discharging

Treatment Same.

11:4:44 No sickness.

Treatment Equal parts of skimmed milk and water. Sugar and sodium bicarbonate.

Urine: Acetone double positive.

13:4:44 No sickness, bowels moving, eye still discharging.

Treatment Skimmed milk, sugar and sodium bicarbonate.

15:4:44 Child taking food and appears well but very thin and pale.

Treatment Put on usual diet with extra sugar and sodium bicarbonate.

Urine: Acetone positive.

By the 26th, the urine was clear of acetone and the eye had stopped discharging and watering. The sodium bicarbonate was stopped.

On 3:5:44 his weight was sixteen pounds thirteen ounces. His mother stated that he was taking his food well, he still required Milk of Magnesia nearly every night. His eye appeared normal.

He is still under observation.

He is a brother of Case 12b.

CASE 14 A. R.Born 11:10:39

Breast fed; teething five months; walking eleven months.

History

Developed normally and had no illness until he developed measles in April, 1943. Since then he has had repeated attacks of sickness coming on every two to three months. His mother had noticed that before these attacks his eyes got heavy, wanted to sit on a chair, gets pale and comes out in heat spots, wants a drink of water and his breath gets a "funny smell". After a day or two he starts to be sick which gradually gets worse until he is being sick every fifteen to twenty minutes. He is sick for two to three days then just gets better and becomes very hungry. The heat spots are usually nearly gone by the time the sickness starts. Between the attacks he is very active and always on the move and is very excitable.

The above history was given by his mother.

13:1:43 He looked pale, eyes heavy, tongue furred, objected to being examined, wanted out of bed to sit on the chair, heat spots almost gone, breath had a musty smell, not like acetone, his temperature and pulse were normal, he did not appear to have any abdominal /

abdominal pain or tenderness, he was very thirsty. He was given a very little water and was immediately sick. It was evident he knew he was going to be sick as he immediately became very restless and wanted a bowl, it looked as if he was trying to hold the sickness back till he got the bowl. After he got the bowl he had a dry retching for about thirty seconds, and then vomited a little watery mucus; after that he seemed much easier and wanted some more of the water.

Treatment Sips of sugar and water, sips of sodium bicarbonate and water.

Urine: Examined at night; acetone triple positive. No other abnormalities.

14:1:43 No sickness since early morning. He is sitting up in bed playing with a pencil and book. He appears very much better and is very talkative. He is not so thirsty. He takes a cupful of his sugar and water and sodium bicarbonate and water about every one to one and a half hours.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate.

15:1:43 No sickness, wants out of bed, is very hungry and wants his dinner.

Treatment Ordinary diet, fats to be restricted, skimmed milk, extra sugar in place of butter.

Sodium /

Sodium bicarbonate morning and night.

Urine: Acetone positive.

16:1:43 Out of bed, playing on the floor, seems well.

18:1:43 Appears well, tongue clean, very active.

Urine: Clear.

Mother advised on condition and early treatment.

Sodium bicarbonate stopped.

25:1:43 Urine: clear.

He has had no actual sick attacks since but on several occasions has shown the early signs with acetone in the urine. Rest in bed and a non-fatty diet with sugar and sodium bicarbonate have cleared it up in two to three days.

His father is a miner; he suffers from a duodenal ulcer, is rather excitable. He has one brother, no sisters. His mother is rather a placid type; she has one brother.

There is no history of similar attacks in their family histories. They live in a room and kitchen. The house is kept very clean and the children are well cared for.

Subsequent History

6:3:43 Acetone double positive; no sickness;
Urine clear 18:3:43.

27:6:43 Acetone positive; no sickness;
Urine /

Urine clear 24:6:43.

3:11:43 Acetone double positive; no sickness;
Urine clear 12:11:43.

21:12:43 Acetone positive; no sickness;
Urine clear 27:12:43

11:4:44 Acetone double positive; no sickness;
Urine clear 18:4:44.

1:9:44 Acetone positive; no sickness;
Urine clear 5:9:44.

On all these occasions he had a similar type of history - pale "hanging" wants to sit about, thirsty and heat spots. Treatment with reduced fats, sugar and sodium bicarbonate prevented the occurrence of sickness and cleared up the heat spots.

CASE 15c. M. I.Born 5.1.30

Bottle fed; teething ten months; walking eleven to twelve months.

History

Always been a healthy but very thin and nervous child. The only trouble she has ever had has been recurring attacks of heat spots since three months old.

2:3:33 Has been fretful for the past week following a bad attack of heat spots, has been off food and constipated. For the past two days she has had a dry sickness; she is now being violently sick, vomiting everything she takes, even boiled water.

Examination

Very pale, thin, nervous child, looks very ill, pulse is rapid, temperature is normal, tongue furred, constipated, abdomen does not appear tender. Evidence of heat spots now nearly clear. Was sick during examination. It was evident she knew the sickness was coming on, she became restless, sitting up holding her breath and indicating she wanted the bowl; after she got the bowl she had several retching attempts before some stringy bile-stained mucus was vomited. During the vomiting her pulse became faster and her face became flushed. After the vomiting stopped she lay down apparently exhausted; her /

her face remained flushed for several minutes and her breathing was rapid. After several minutes she wanted water to drink.

Treatment

Sips of sugar and water alternately with sodium bicarbonate and water, this was to be given with the child lying flat. At night a dose of Milk of Magnesia was to be given.

Urine: Acetone triple positive. A lot of mucus.
No sugar or albumen.

3:3:33 Has been sick all night but not so frequently some of the feeds staying down. Pulse is rapid, temperature normal, lying very quietly in bed, eyes appear sunken in head, face very pale. No abdominal tenderness or rigidity. Bowels not moved.

Treatment Same.

4:3:33 Slept greater part of night, feels sick and often is sick when she moves or lifts her head. Mother states she is very thirsty. Her eyes are inflamed, the heat spots can hardly be seen now, bowels not moved.

Treatment Same. Eyes to be washed with boric solution and Argyrol drops to be instilled night and morning. Dose of Milk of Magnesia.

5:3:33 Slept all night. Milk of Magnesia stayed down, bowels moved. Child lying quietly in bed, eyes /

eyes still red, face very pale and pinched. Pulse fast, temperature normal.

Urine: Acetone triple positive.

Treatment Same.

6:3:33 Bowels moved during the night, was violently sick at same time, has not been sick since. Eyes clearer, looks better, wants food.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate.

Urine: Acetone double positive. No other abnormalities.

7:3:33 Urine: double positive.

8:3:33 No sickness, eyes clear, still very pale, bowels moving, sitting up in bed, tongue cleaner, very nervous, pulse rapid, temperature normal. Her mother states that she gets very nervous and excitable when anyone comes in, especially when I come in. She takes her pulse and temperature and they are always normal, the pulse never being above 70.

Treatment Light non-fatty diet, skimmed milk, extra sugar and sodium bicarbonate drinks night and morning. Dose of Milk of Magnesia at night.

10:3:33 No sickness, bowels moving, looking better,

Treatment Same.

13:3:33 Urine: Acetone double positive. No other abnormalities.

14:3:33 /

14:3:33 Child appears well, still very thin and pale and excitable.

Treatment Same.

17:3:33 Urine: Acetone a trace.

20:3:33 Still pale and nervous; taking her food well.

Treatment Mother advised on the condition. To avoid too much fat in the diet, to see that the child had adequate rest and to look for the early symptoms and when present to put the child to bed; stop all fats and give sugar and water and sodium bicarbonate and Milk of Magnesia when required.

She was given Halibut Liver Oil and Ferri et Ammon. Citras. grains v t.i.d.

16:7:33 Since last attack she has kept fairly well and has been gaining weight. Been troubled with several attacks of heat spots.

Last week she developed a bad attack of heat spots, was very restless, not sleeping well, required to have Milk of Magnesia every night; for the past two to three days she has been off food with an occasional attack of dry sickness; now she is being violently sick.

Examination

Pale, thin child, very fretful, objects to being examined, tongue furred, pulse and temperature normal; /

normal; heat spots hardly visible. Her mother states that whatever she takes is immediately vomited.

Treatment Sips of sugar and water and alternately sodium bicarbonate and water, to be given lying flat.

17:7:33 Urine: Acetone double positive. No other abnormalities.

18:7:33 No sickness since last night. Bowels moved.

Treatment Non-fatty diet, equal parts of skimmed milk and water, extra sugar and sodium bicarbonate.

20:7:33 Urine: Acetone positive. No sickness, child appears well and is out of bed.

27:7:33 Urine: Acetone clear. Child pale and nervous.

Treatment Sodium bicarbonate stopped. Child to have adequate rest. Early signs to be treated by rest in bed and diet.

13:10:33 Heat spots for past three to four days, off food, pale tongue furred, constipated, occasional dry sickness - no vomiting, fidgety and restless, always wants to be on the move.

Treatment Put to bed. Non-fatty diet, skimmed milk, extra sugar, sodium bicarbonate. Milk of Magnesia at night.

14:10:33 Urine: Acetone double positive. No other abnormalities.

15:10:33 /

15:10:33 Heat spots dying, refusing food, drinking a lot of skimmed milk, very fretful, bowels not moved. Pule and temperature normal.

16:10:33 Urine: Acetone double positive. No sickness, bowels moved twice, taking food better.

18:10:33 Urine: Acetone positive.

20:10:33 Child appears well but still pale, taking food well.

Urine: Acetone a trace.

27:10:33 Urine: Clear.

Sodium bicarbonate stopped; ordinary diet.

She had several similar attacks; if treatment was started early she never developed sickness; when she did have sickness it cleared by the second day under treatment.

3:1:34 Acetone double positive; no sickness.

9:5:34 Acetone double positive; no sickness.

26:5:34 Acetone triple positive; sickness two days.

14:8:34 Acetone double positive; no sickness.

27:12:34 Acetone triple positive; sickness one day.

28:3:35 Acetone positive; no sickness.

20:12:35 Acetone triple positive; sickness three to four days.

19:4:36 Acetone positive; no sickness.

1:9:36 Acetone double positive; no sickness.

7:3:38 Acetone double positive; no sickness.

She /

She had one bad attack on 20:12:35, sickness lasted three to four days and she went down quickly and lost a lot of weight. She was kept in bed till 6:1:36. The urine did not clear until about the middle of January. Her last attack was on 7:3:38. She had no sickness, the urine showed acetone double positive. Was put on usual treatment. Urine clear by 14:3:38. She was off school four days.

Family History

She is the second of two girls. There is no history of the elder girl having had recurrent sickness during childhood.

Both children are well cared for.

The mother is a well balanced person, one of a very large family. The father is a thin, nervous person. He is a steady working miner; is a member of a large family.

Her sister's grandchild suffers from cyclic vomiting. (Case 16c).

Present Condition

She is a tall pale, thin, nervous girl and is well up in her class at school.

Menstruation has not yet begun.

CASE 16c. F. S.

Born 31:12:42 (Twin)

Breast fed three weeks; teething fifteen months; not walking.

18:3:43 History

Child been vomiting all her feeds for the past two days. Lately she has lost all her colour, not feeding as usual and constipated.

Examination

Small, very pale child lying quietly in her cot. When I took her hand she seemed to waken with a start and started moving her head from side to side. Her mother states that she constantly does that, she had noticed it first three to four days ago. Her pulse and temperature are normal. It is evident she has lost weight, she was always the smaller of the two but now there is a marked difference. There is no head rigidity and Kernig's sign is negative. Abdominal palpation does not appear to cause discomfort, and there is no rigidity. The ears appear normal. The chest appears clear. Bowels have not moved for two days.

Advised sips of boiled water and dose of Milk of Magnesia.

19:3:43 Condition same. Bowels moved a little. Most of the Milk of Magnesia remained down. Had slept /

slept between sick attacks. Advised half strength saline, dose of Milk of Magnesia.

20:3:43 Sickness stopped, bowels moved. Child appears thirsty. Temperature normal, pulse fast.

21:3:43 No sickness, child taking drinks well, appears better, head movement stopped. Pulse and temperature normal.

Treatment Equal parts of milk and water, Milk of Magnesia when required.

22:3:43 No sickness, bowels moving, child appears content.

24:3:43 Child progressing.

Treatment Sister Laura's Food.

28:3:43 Food agreeing, child progressing, still very pale.

(The urine was not tested as I did not suspect cyclic vomiting.)

2:8:43 History

Child been going back for the past week, not taking feeds, constipated and restless and crying a lot. Started vomiting its feeds yesterday; now being sick about every hour or so. The vomited material being mainly bile.

Mother states that since the last attack she has had several "bouts" of sickness, usually lasting one to two days then clearing up; she said it was always /

always due to giving Cod Liver Oil and after she stopped it the child was better.

Examination

Thin, pale child, evidence of loss of weight. Temperature normal, pulse fast, no abdominal signs, no head movements, no cough, no heat spots, constipated.

Treatment

Half strength saline, dose of Milk of Magnesia.

3:8:43 Urine: Acetone triple positive. Large amount of mucus; no albumen; no sugar.

Still being violently sick, the vomiting coming on oftener; child looks very ill, eyes sunken, face very pale, lying very quietly in bed, temperature 98.8 degrees F, pulse rapid, no abdominal tenderness, abdomen flat, bowels not moved, no cough, respirations fast.

Treatment Sips of sugar and water, sips of sodium bicarbonate and water, dose of Milk of Magnesia.

Night - sickness less, still looking very ill, respirations quieter.

Treatment Same.

4:8:43 No sample of urine got as mother was afraid to move child as it seemed to upset her. Only occasional sickness, bowels moved a little, child gulping its feeds and is taking about a cupful at /

at a time. Child is sleeping, temperature is normal, pulse quiet, breathing quiet.

Treatment Same.

5:8:43 No sickness, bowels moving, child sleeping a lot between feeds. Appears better, is lying asleep in cot.

Urine: Acetone double positive. No other abnormalities.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate.

6:8:43 No sickness, child progressing.

Treatment Same, Adexolin to be given.

7:8:43 Urine: Acetone positive.

9:8:43 No further sickness, child taking feeds well, still very pale; child sleeping a lot.

Urine: Acetone a trace.

Treatment Three parts of skimmed milk to one of water, sugar, sodium bicarbonate. Adexolin.

13:8:43 Urine: very faint trace.

Child progressing, still small, very pale.

Treatment Mother advised on condition, avoid too much fat, child to be kept outside as much as possible adequate sugar and Adexolin. Ferri et Ammon. Citras. grains iii, t.i.d.

18:8:43 Urine: Acetone clear.

13:12:43 /

13:12:43 Has been crying a lot and off food for the past three to four days. Has required Milk of Magnesia each night, has become very pale; to-day she has started vomiting attacks coming on about every two hours, between attacks she is now lying very quietly in her cot and won't take anything. The vomited material is watery bile-stained mucus.

Examination

She looks very pale and thin, she seems to be taking no interest in anything. The pulse and temperature are normal. The abdomen feels soft and palpation does not seem to cause pain, there is no rigidity. She has no cough. The tongue is furred. There are no head movements or retraction.

Treatment

Sugar and water, sodium bicarbonate and water, dose of Milk of Magnesia.

14:12:43 Urine: Acetone triple positive. No other abnormalities.

15:12:43 Sickness still same, child going down rapidly. Temperature is normal, pulse fast, respirations 26. There is no abdominal tenderness.

Treatment Same.

16:12:43 No sickness since early morning. Child seems very thirsty. Pulse and temperature normal, respirations 22. Bowels moved. No sample of the urine /

urine got.

17:12:43 No sickness, bowels moved, child sleeping between feeds.

Urine: Acetone double positive.

18:12:43 No sickness.

Treatment Equal parts of skimmed milk and water, sugar, sodium bicarbonate.

20:12:43 No sickness, child progressing.

Treatment Skimmed milk, sugar and sodium bicarbonate. Adexolin to be given.

Urine: Acetone positive.

24:12:43 No further sickness, bowels moving, having little Milk of Magnesia every second to third night.

Urine: Acetone clear.

Treatment Ordinary diet, restricted fats, extra sugar, Adexolin.

16:2:44 Off food, pale, restless.

Since the last attack one has had several mild attacks which cleared up by putting the child on skimmed milk, extra sugar and sodium bicarbonate then in a day or two she was back to her feeds.

Examination

Child looks very pale, is very thin and soft; she is very much smaller and thinner than her twin sister. Her pulse and temperature are normal, she appears to have no abdominal pain or tenderness.

She /

She has not cut any teeth. Her general condition appears very unsatisfactory. Her mother states she has great difficulty in feeding her, some days she takes her food very well other days she cannot get her to take anything. At the times when she is off her food her constipation gets worse. She is having the same food as her sister.

17:2:44 Urine: Acetone double positive. No other abnormalities.

18:2:44 Been vomiting her feeds since yesterday afternoon, slept fairly well during the night but has been sick three times this morning. The bowels did not move yesterday or this morning. The child looks ill, is very pale, eyes sunk in head, the temperature is normal, the pulse fast, the abdomen does not appear tender.

Treatment Sips of sugar and water, sips of sodium bicarbonate and water, dose of Milk of Magnesia.

19:2:44 Urine: Acetone triple positive. No other abnormalities; some mucus.

No sickness since late last night, child very thirsty. Bowels not moved. Pulse little fast, temperature normal.

Treatment As much sugar and sodium bicarbonate as the child can take. Dose of Milk of Magnesia.

20:2:44 No further sickness, bowels moved last night /

night and again this morning. Child appears much more content, and sleeping a lot.

Urine: Acetone double positive.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate. Adexolin drops.

22:2:44 No further sickness, bowels moving, still having Milk of Magnesia.

Treatment Skimmed milk, extra sugar, sodium bicarbonate, non-fatty foods.

23:2:44 Urine: Acetone positive.

27:2:44 No sickness; child progressing.

Treatment Ordinary diet, restricted fats, extra sugar, sodium bicarbonate.

Urine: Acetone a trace.

6:3:44 Urine: Acetone a trace.

Taking feeds and appears to be thriving. It is surprising how quietly this child goes down during these attacks. About this time her teeth were beginning to come through.

On 8:3:44 her weight was twelve pounds twelve ounces. She was still very pale and was having Ferri et Ammon. Citras, grains iii, t.i.d.

Urine: Acetone a trace.

On 5:4:44 her weight was fifteen pounds thirteen ounces. Her mother stated that she had been keeping well.

On /

On 19:4:44 she had a similar attack, sickness lasted two days, again she went down rapidly. The treatment was the same. The urine at the time of the sickness showed acetone triple positive, clearing after the sickness stopped but still a trace on 3:5:44 when her weight was fifteen pounds twelve and a half ounces.

On 17:5:44 her weight was sixteen pounds three ounces and the urine was clear.

On 23:5:44 I was called to see her as she was vomiting blood and was shown several towels with a lot of fresh blood on them. The mother stated that during the morning she had had several attacks of colic and has vomited brown "stuff". Her temperature was normal but her pulse was very fast and she looked very pale and shocked; she had no abdominal rigidity.

She was moved to Stirling Royal Infirmary.

Her twin sister has never shown any signs of cyclic vomiting. She was late in teething. She appears a healthy child. The home surroundings are good and the children well cared for.

The father is an officer in the R.A.F. and appears a normal type. He is a member of a large family. The mother appears a well balanced type but worries a lot about the children.

She has had two further attacks of vomiting blood, the urine showing acetone triple positive and clearing /

clearing by twelfth to thirteenth day. She is put on the usual treatment which clears it up in one to two days.

CASE 17 T. L.

Born 28:1:42

Breast fed one year; teething ten months; walking at 14 months.

27:11:43 History

Had always been a healthy child until last week or so; went off food, became listless and constipated and at times very irritable. For the past week he has been having attacks of sickness; mother said she did not think much about them as his brother did the same when he was a baby and even still has them. The child is now very sick, is getting very thin, is very thirsty but immediately he takes anything he is sick, even boiled water is vomited.

Examination

Child pale and fretful. Temperature is normal, pulse fast, abdomen does not appear tender. There are no heat spots, no history of heat spots. He was given a little water and he was immediately sick, vomiting watery bile-stained mucus.

Treatment

Dose of Milk of Magnesia, sips of water.

28:11:43 Urine examined in the morning - acetone triple positive. No other abnormalities.

Afternoon - still being violently sick, crying for water which is immediately vomited. At present lying /

lying very quietly in bed, he looks ill.

Temperature 99.2 degrees, pulse rapid, tongue furred, bowels not moved.

Treatment Sips of sugar and water alternately with sips of sodium bicarbonate and water, to be given lying flat.

29:11:43 Child sleeping. Was sick three times during the night, was given a little sodium bicarbonate and water after the sickness, this remained down. Bowels not moved. Dose of Milk of Magnesia.

1:12:43 Bowels moved, no sickness, very fretful. Temperature normal, pulse fast.

Treatment Equal parts of skimmed milk and water with extra sugar and sodium bicarbonate. Dose of Milk of Magnesia.

Urine: Acetone double positive.

3:12:43 No sickness, generally appears better. Bowels moved.

Treatment Non-fatty diet, skimmed milk, extra sugar, sodium bicarbonate.

4:12:43 Urine: Acetone positive.

6:12:43 Urine: Acetone a trace.

12:12:43 Was sick twice yesterday (Sunday), now being violently sick. Seemed no reason for the return of sickness as his mother had not changed the diet. Child is restless and fretful, wants nursed, bowels /

bowels did not move yesterday. Pulse fast, temperature normal.

Treatment Sugar and sodium bicarbonate; dose of Milk of Magnesia.

13:12:43 Urine: Acetone double positive.

No sickness since last night, child very thirsty, bowels moved.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate.

15:12:43 Urine: Acetone double positive. Had been sick once yesterday after drinking milk hurriedly.

17:12:43 No sickness, child irritable. Pulse and temperature normal.

20:12:43 Urine: Acetone positive. No sickness.

Treatment Non-fatty diet, skimmed milk, sugar and sodium bicarbonate.

22:12:43 Been sick since last night, bowels moved during the night. Child very restless, pulse fast, no temperature, no abdominal tenderness.

23:12:43 Urine: Acetone double positive.

24:12:43 Sickness stopped.

27:12:43 Urine: Acetone positive. No sickness.

3:1:44 Mother called at the surgery with a sample of the urine and stated that the child had passed an "Airth" worm about ten inches long. "Airth" worm /

worm is the local name for round worm.

Urine: clear.

10:1:44 Urine: clear.

Child on ordinary diet, extra sugar, restricted fats.

3:4:44 History

Since passing the round worm the child had been thriving. For the past two to three days he had been "hanging", off food, now vomiting everything he takes, even water. He only vomits when he takes anything.

Child looks pale, temperature 99.6 degrees, pulse fast, no abdominal tenderness, no cough, tonsils slightly inflamed, tongue furred, bowels not moved.

Treatment Sips of sugar and sodium bicarbonate.

Dose of Milk of Magnesia.

4:4:44 Urine: triple positive. No other abnormalities.

5:4:44 No sickness since yesterday, pulse and temperature normal. Throat normal. Bowels moved.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate.

6:4:44 Urine: Acetone positive.

7:4:44 Urine: Acetone a trace.

No sickness, child well, ordinary diet.

This /

This child is still under observation.

He is not the usual cyclic vomiting type; he is developing well, has fairly good colour, and the only suggestive sign now is that he is still very nervous and jumpy.

Family History
Given by the Mother

W.L. Born 28:4:30

Teething ten months; breast fed seven months; walking eleven months. Since about the age of two years, he has had recurring attacks of sickness usually lasting about two to three days but occasionally as long as a week. The attacks always began in the same way - following any excitement, e.g. fighting, he would go off his food, go pale then develop sickness. The sickness usually began in the morning and got worse as the day went on until he would be sick even without taking anything. The condition was diagnosed as gastric catarrh and he was put on boiled or barley water and given powders. After the sickness stopped he quickly regained what he had lost (indicating weight) and his appetite was good. He has always been a very nervous child. He has never suffered from heat spots.

Beyond an attack of jaundice at seven years of age and his sick attacks he has had no other illness.

He has had no attacks for the past two to three years. /

CASE 18d. M. F.

Born 23:10:38

Bottle fed. Two teeth at five months, no more till ten months. Walking one year.

History

Her mother states that following any excitement she is sure to have two to three days sickness. She can always tell when it is coming on; she goes pale, off her food, gets very tired and irritable then she starts being sick and nothing will lie in her stomach, usually on the second day of the sickness she develops a mucous diarrhoea which persists for a day or two after the sickness. During these attacks she is usually highly fevered. She "comes down" very quickly during these attacks but usually picks up just as quickly afterwards. She had a bad attack when she was four years ten months; this attack was associated with worms, for which she had bowel wash-outs as nothing would like on her stomach; after the worms cleared, she rapidly improved. These attacks were diagnosed as bile attacks. She has never suffered from heat spots.

16:12:42 First seen.

For the past three to four days she has been "hanging" off food, fevered, sick and now she is starting diarrhoea. The mother says it is all about
a /

a children's party she is going to next week, it is a fancy dress party, and she has done nothing but talk about it and dress herself up since she heard about it.

She is a thin, pale, nervous child lying very quietly in bed. Temperature 101.2, pulse fast, there appears to be no abdominal pain or tenderness. The vomited material is mainly bile and the bowel movement is thickish mucus (kept by the mother to show to me). Her breath smells of acetone.

Treatment Sips of sugar and water alternately with sips of sodium bicarbonate.

17:12:42 Urine: Acetone triple positive. No other abnormalities.

Was once sick during the night but none since. Was sick several times yesterday after I left but the sickness did not seem to take so much out of her. Diarrhoea still troublesome. Bowels moved three times this morning. Still mucus being passed. Temperature 99.8, pulse fast. No abdominal pains or tenderness.

Treatment Same, but more being allowed at a time, as much as the child was willing to take.

18:12:42 Urine: Acetone double positive.

No sickness, diarrhoea better, only moved once this morning since yesterday afternoon, and was a mixture of /

of mucus and faecal matter.

Temperature normal, pulse normal, child wants out of bed and is very hungry.

Treatment Equal parts of skimmed milk and water, extra sugar and sodium bicarbonate.

19:12:42 Child appears much better, is quite talkative and showing the drawings she has done. Pulse and temperature are normal. No sickness or diarrhoea.

Treatment Non-fatty foods, skimmed milk, extra sugar and sodium bicarbonate.

20:12:42 Urine: Acetone positive.

21:12:42 Child out of bed, appears very well, no sickness, bowels moving normally.

Treatment Same.

24:12:42 Urine: Acetone a trace.

Treatment Ordinary diet, fats to be restricted for the next two to three weeks. To be given Adexolin. Teeth to be attended to. Mother advised on the condition and treatment especially the avoidance of over-excitement.

She had a similar attack just before going to school and another the day she returned to school after the Summer Holidays.

CASE 19d W. F.

Born 16:7:41

Teething eight to nine months. Breast fed three months; walking eighteen months.

History

Since he was a small baby he has been troubled with heat spots. Has always been a nervous, shy child. He had never had sick attacks like his sister. With the heat spots he gets very restless and irritable, especially at night and appears to be feverish and throws off the bed clothes, he goes pale and off his food and his breath gets a musty smell. He gets attacks of dry sickness but does not vomit. This usually lasts from one to two days then he gets better. During this time he is usually constipated and requires medicine every night.

14:11:43 Has been troubled with heat spots for past three to four days, very irritable and off food. Thin, very excitable child, refuses to be examined, had to be held to get his temperature, 102.4 degrees, pulse rapid. Evidence of heat spots now dying down, face is flushed but mother states it is due to the excitement and after I go he will get paler.

Examination was impossible.

15:11:43 Urine: Acetone double positive. No other abnormalities.

Much /

Much more settled; temperature 100 degrees, pulse fast, no abnormal tenderness, still off food.

Treatment Equal parts of skimmed milk and water, extra sugar and sodium bicarbonate in orange juice.

Dose of Milk of Magnesia.

16:11:43 To begin with the mother has difficulty in getting him to take the food, by night he was asking for his drinks and he is taking a lot. The bowels moved in the morning.

17:11:43 Urine: Acetone double positive.

18:11:43 Temperature and pulse normal, is very hungry, sitting up in bed clammering for food.

Treatment Non-fatty foods, skimmed milk, extra sugar and sodium bicarbonate. Milk of Magnesia at night.

20:11:43 Urine: Acetone positive.

Child taking food well.

24:11:43 Urine: Acetone a trace.

Treatment Ordinary diet, reduced fats, extra sugar, sodium bicarbonate. Mother advised that the condition was similar to that of his sister and to treat it in the same way.

5:12:43 Urine clear.

The home surroundings are good. The children are well cared for. The father is a foreman electrician; he is of a nervous excitable type.

He /

He is not a member of a large family and as far as he knows no other members of his family ever suffered from cyclic vomiting. The mother is an average type of woman. She is not a member of a large family. No family history as far as she knows.

CASE 20 A. S.Born 1:11:41

Breast fed; teething ten months, others very slow; at one and a half years he had only five teeth now he has sixteen; walking ten months.

History

Has always been a small, pale, very nervous and excitable child. All his life any little excitement would cause him to have sick attacks usually lasting one to two days and then he was better. He usually was not off his food much, it was more vomiting everything he took at these times. He has never suffered from heat spots.

4:11:43 Very bad attack of sickness. Small, thin, very pale, nervous child, large bright eyes with that constant look of surprise. His mother states he is being violently sick, even being sick when there is nothing in his stomach. The room smells of acetone which the nurse also has noticed. She says the material he is vomiting now is bile and the sickness is coming on about every half hour.

His pulse is a little fast, his temperature is normal. There does not appear to be any abdominal pain or tenderness. The cervical glands are enlarged but not tender, the throat is a little congested, probably due to the vomiting.

Treatment /

Treatment Sips of sugar and water and alternately sips of sodium bicarbonate and water; to be kept quiet in bed.

5:11:43 Urine: Acetone triple positive. No other abnormalities.

Sickness, though not so severe, persisted till late last night. Was sick twice during the night and has been sick once this morning. He seems to be very thirsty and the mother states that when he takes his drinks too hurriedly he is apt to be sick.

Pulse and temperature normal. Bowels not moved.

Treatment Same. Dose of Milk of Magnesia.

6:11:43 No sickness, bowels moved. Pulse and temperature normal. Is still very thirsty.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate.

7:11:43 Urine: Acetone double positive.

8:11:43 No sickness, bowels moving, child out of bed.

Treatment Non-fatty diet, sugar and sodium bicarbonate. Adexolin.

10:11:43 Urine: Acetone positive.

Treatment Same.

14:11:43 Urine: Acetone a trace.

Child well but still very pale.

Treatment Same.

21:11:43 /

21:11:43 Urine clear.

Treatment Ordinary diet, restricted fats for next three to four weeks; Adexolin.

Mother advised on condition, to look for the early signs, to see that he gets adequate rest and to avoid over-excitement. The father has a prosperous baking business. He appears a normal type. The mother is the youngest of a large family, is a nervous and worrying type of person.

No history of similar attacks can be got on either side of the family.

13:4:44 Called to see the child. He appeared very well, still thin and pale. Mother states that he has had no further sick attacks, that since the last attack she has kept giving him a little sodium bicarbonate in his orange juice and that he has never been better.

Urine examined	<u>7:8:44</u>	Clear
	<u>23:8:44</u>	Clear
	<u>7:9:44</u>	Clear
	<u>13:10:44</u>	Clear
	<u>28:12:44</u>	Clear
	<u>14:4:45</u>	Clear

CASE 21 T. F.Born 12:7:40

Breast fed three months; teething thirteen months; walking twenty months.

History

About a month after he was put off the breast he developed infantile eczema. The condition started on his face and spread to behind the ears and then to the head. This condition was very intractable. He was treated with Gentian Violet 1%, and Ichthyol 1%, Zinc Oxide 15-30%, Paraff. moll. qs.

The condition would appear to be clearing then flare up again, starting behind the ears and rapidly spreading over the face and head.

11:8:41 Being treated for eczema of face during one of the recurrences. Developed sickness and diarrhoea.

Examination

Weeping eczema of face and head, vomiting everything he took, even boiled water, with the sickness he had diarrhoea, green watery stools, temperature 99.8 degrees, pulse fast, tongue furred, child very restless, breath smelt of acetone.

Treatment

Sugar and water, sodium bicarbonate and water.
Urine: Acetone triple positive. Trace of albumen.
No sugar.

13:8:41 /

13:8:41 Still sickness and diarrhoea. Even lifting the child to change it caused sickness and diarrhoea.

Treatment Same.

No sample of the urine got.

14:8:41 Sickness better but diarrhoea worse. Temperature 101.4, pulse rapid, child going down rapidly and looks very ill, sighing respirations, breath strong smell of acetone. (priest called in).

Treatment More Sodium bicarbonate and less sugar.

Night visit - No sickness, diarrhoea still very bad, temperature 99.8 degrees, pulse very fast, breathing quieter. Unable to get sample of urine.

Treatment Same.

15:8:41 No sickness during the night, bowels moved twice during the night, once this morning. Temperature 98.6 degrees. Pulse rapid. Child appears much better and is sleeping.

Treatment Same.

Urine: Acetone double positive. Trace of Albumen. No sugar.

16:8:41 No sickness or diarrhoea, child appears more content, temperature normal, pulse fast. Up till now no attempt had been made to treat eczema and on removing dressings the condition appeared much better.

Treatment /

Treatment Equal parts of skimmed milk and water, glucose and sodium bicarbonate.

17:8:41 No sickness, bowels not moved, pulse and temperature normal. Eczema drying and scaling.

Treatment Skimmed milk, sugar and sodium bicarbonate.

18:8:41 Child progressing.

Treatment Same.

Urine: Acetone positive; no albumen.

19:8:41 Child progressing, eczema improving, keeping dry.

Treatment Non-fatty foods, skimmed milk, sugar and sodium bicarbonate.

20:8:41 Child progressing.

21:8:41 Child taking food well, eczema clearing from head and face.

Treatment Same.

Urine: Acetone a trace. No albumen.

22:8:41 Eczema clearing except behind ears, still red, raw and slightly weeping.

Treatment Child being taken out as much as possible. Put back on usual diet. Adexolin to be given.

1:9:41 Eczema behind ears clearing, child appears well. Mother advised on condition and advised that eczema may be an early sign of cyclic vomiting and if the condition reappeared to bring a sample of urine.

Urine: clear.

I saw the child once a fortnight during the next five months, teething was progressing slowly, the eczema behind the ears never completely cleared up and the urine occasionally showed a trace of acetone.

In April 1942, the dermatitis completely cleared and the urine kept free from acetone and the child began to walk.

I did not see the child again until Saturday evening - 20:2:43

History

For the past three to four days the child had been going off his food, restless, constipated and the eczema had started behind the ears and was now involving the face. Sickness and diarrhoea started last night. A sample of the urine had been kept from yesterday morning. The mother stated that the child had been very well and very active and that he was having the "round of the house", was having Cod Liver Oil daily instead of Adexolin. On Sunday night he had had a few home made chips.

Examination

Child restless, wants to scratch his face and ears. Pulse is normal, temperature 100 degrees, tongue is furred. Eczema active on face, behind ears and a little on the head.

Treatment /

Treatment Sugar and water, sodium bicarbonate and water. Ichthyol 1%, Zinc Oxide 30% to be applied to face.

21:2:43 Urine: Acetone triple positive. No albumen. No sugar.

22:2:43 Sickness much better, diarrhoea still active. Pulse fast, temperature 99.6 degrees.

Treatment Same.

23:2:43 No sickness, bowels still moving five to six times per day. Pulse fast, temperature normal. Eczema drying.

Treatment Same.

Urine: Acetone double positive.

25:2:43 Sickness and diarrhoea stopped. Pulse and temperature normal. Eczema clearing.

Treatment Equal parts of skimmed milk and water, sugar and sodium bicarbonate.

27:2:43 No sickness or diarrhoea. Eczema clearing, behind the ears still moist.

Treatment Skimmed milk, sugar, sodium bicarbonate, non-fatty food, jelly, syrup or treacle if possible.

Urine: Acetone positive.

1:3:43 Progressing, behind the ears still moist.

4:3:43 Ears drying.

Urine: Acetone positive.

8:3:43 Behind ears still inflamed and scaling.

15:3:43 /

15:3:43 Behind ears healing.

Urine: Acetone a trace.

Treatment Ordinary diet, restricted fats, extra sugar in place of fats.

22:3:43 Slight redness behind both ears, face and head clear.

Urine: Acetone a trace.

Treatment Little sodium bicarbonate night and morning.

21:4:44 For past three to four days has been going off food, lost colour, very constipated, very fretful and wanted nursing, has been rubbing behind his ears a lot, eczema started up again. No sickness or diarrhoea.

Examination

Behind both ears red and inflamed, child irritable. Temperature 99.8 degrees, pulse normal, tongue furred, cheeks pale.

Treatment Non-fatty diet, equal parts of skimmed milk and water, extra sugar and sodium bicarbonate, dose of Milk of Magnesia.

22:4:44 Urine: Acetone triple positive. Trace of albumen, No sugar.

Refusing food, dry sickness, bowels not moved.

Temperature 100 degrees. Pulse fast.

Treatment Equal parts of skimmed milk and water, extra /

extra sugar and sodium bicarbonate. Dose of Milk of Magnesia.

23:4:44 Feeling sick, no actual sickness, very thirsty, bowels moved. Eczema behind ears spreading. Temperature 99.8 degrees, pulse rapid. Treatment Same.

24:4:44 (Seen twice in my absence by Dr P. King). Was being violently sick, no diarrhoea, temperature 101.4 degrees, pulse very rapid. Was put on sugar and water and alternately sodium bicarbonate and water.

Night - Urine: Acetone triple positive. Trace of albumen. No sugar.

Still very sick.

25:4:44 Sickness much better, but child had difficulty in swallowing.

Examination of throat showed large diphtheritic patch on right tonsil, throat generally inflamed.

Removed to Infectious Hospital.

CASE 22 W. R.

Born 13:8:31

Breast fed seven to eight months; teething - cannot give time; walking eleven to twelve months.

History

Has always been a very nervous child, cannot be left in a room by himself, won't go out alone in the dark, even a very short distance, won't go to sleep at nights unless there is someone in the room with him, and the light is left on. Since birth he has been troubled with heat spots, the attacks usually lasting twelve to fourteen days, the spots never went septic. His mother had noticed that eggs and milk puddings were bad for causing the heat spots and that fried foods also were apt to cause them. As a baby when these attacks were on, his mother always noticed that he had a rather unusual sweetish smelling breath like what he has just now.

When he was about three and a half years of age he was attended for an illness which the doctor thought was going to be pneumonia - a very high temperature, rapid pulse, looked very ill, would eat nothing, was always feeling sick. This cleared up in three to four days and he was all right again. The doctor said it was one of these attacks you get in children which never come to anything and was probably /

probably due to something unusual he had been eating.

About one year ago he had an illness which lasted about a fortnight. He had an attack of his heat spots and was off his food. He then started having acute abdominal pains and colic followed by sickness, the sickness came on every one to two hours and went on night and day, he kept vomiting bile. The acute sickness lasted three to four days and the sick feeling for another week. When the sickness started first he was highly fevered and his face was flushed. His mother noticed that before the sickness came on he developed a lot of small hard swellings in his eyelids and after four to five days they burst and discharged matter then cleared up.

On inquiring from his mother it was found that at that time he was sitting his control examination at school, and that having brought that to her mind, most of the times he has had his heat spots, had been off food and very irritable, have been either before his examinations or after them, when he was waiting for the results.

His mother states she has never heard of a boy like him. He can worry himself into having a fever, being completely "washed out", as white as a sheet and so un-nerved that he faints. This has happened on several occasions since he went to school and always /

always has been associated with examinations.

Even the approach of an important football match can completely knock him out and on the day of the match he gets just limp and can eat nothing and at the match he gets very excited at the beginning, but by the end he is so exhausted that he ceases to take an interest in it.

Present attack

Sunday 28:5:44

Has been having a lot of heat spots recently, pale, very tired and limp and not keen on his food. Yesterday he seemed better. Was feverish during the night and did not want any breakfast this morning. About noon he started vomiting and has had incessant sickness since, coming on every half to three quarters of an hour. The vomited material is bile.

Examination

Face flushed, pupils dilated, tongue furred, complaining of severe abdominal pains. Temperature is normal, pulse 76. He complains of pain and tenderness to the right of the gallbladder, the liver is not enlarged, pain and tenderness round the umbilicus and in both iliac fossae. There is slight rigidity over the right side of the abdomen.

Night visit - Received sample of the urine.

Condition the same.

Treatment Sugar and water, sodium bicarbonate and water /

water flavoured with orange.

29:5:44 Was sick once during the night after the sodium bicarbonate which he does not like and was probably too concentrated. The vomited material was mainly bile. Temperature 101 degrees, pulse 80. Abdominal pain now mainly in the right iliac fossa, subcostal pain gone. The pain settled down in the right side following a discussion of appendicitis by friends who came in to see him. The increased temperature is probably due to a hot water bottle which he has.

Urine: Acetone triple positive. No other abnormalities.

Treatment Same. Advised him that the sodium bicarbonate was good for him and he took half a teaspoonful in orange juice while I was there without any bad effect.

Night No sickness. Pain and tenderness in right iliac fossa. Bowels not moved. Pulse and temperature normal. Advised a dose of Milk of Magnesia.

30:5:44 No sickness, bowels moved. Pulse and temperature normal. Some deep tenderness in right iliac fossa, no rigidity. Mother states he has taken over two teaspoonfuls of sodium bicarbonate.

Urine: Acetone positive.

Treatment /

Treatment Non-fatty diet, skimmed milk, extra sugar and sodium bicarbonate. Still in bed.

31:5:44 Pulse and temperature normal. No sickness, bowels moved. Slight tenderness on deep pressure in right iliac fossa. Had been joking about which hospital he should go to if it still turned out to be an appendicitis.

Urine: Acetone positive.

Treatment Same; out of bed.

2:6:44 Called to see him; found he was at the pictures.

Urine: Clear.

5:6:44 Appears back to normal. Advised his mother on the condition. To avoid over-excitement and to start treatment immediately she saw any of the early signs. I also advised her to carry on giving small daily doses of sodium bicarbonate.

The father is a well-balanced person. He has one brother and one sister. No history of similar attacks in their histories. The mother is an excitable person, a member of a very large family and they are all very nervous.

Two of the patient's cousins suffer badly from heat spots.

CASE 23 B. D.Born 2:8:34

Breast fed two to three months; teething seven to eight months; walking eleven to twelve months.

History

Has always been a very nervous child. Since about two years of age has suffered from heat spots. Since going to school she has suffered from repeated attacks of sickness. She is very keen on school and does very well. The attacks are always associated with going back to school or with school examinations.

History of typical attack.

Has been getting excited about going back to school; is jumpy during sleep; goes very pale and off food, develops pains in the abdomen, usually the lower part; this is followed by a feeling of going to be sick then the sick attacks start and she gets repeated sickness; vomitus mainly bile. The urine at this stage is loaded with acetone.

Sugsr and water, sodium bicarbonate and water and rest in bed clears it up in one to two days, acetone is clear by the following week. She is a typical cyclic vomiting child - small, thin, pale, exceedingly nervous, bright-eyed and rose lips, "small edition" type. She is never fevered and her pulse is not fast during these attacks. There is no liver tenderness /

tenderness or enlargement.

Since going to school I have attended her on six occasions for such attacks.

On the last occasion she had a similar history on the day she returned to school. She had had the usual pre-vomiting signs and symptoms followed by abdominal pains mainly centred in the lower part of the abdomen round about the umbilicus and sickness. I saw her on Sunday afternoon. The mother said she was very worried in case it was an appendicitis as one of her friends had a child with the same symptoms and had recently been operated on for appendicitis.

I explained the difference between her child's condition and appendicitis. Apparently the child heard the discussion and between hearing this and the mother's repeated asking if the pain was in the right side, I was called back later in the evening because the child had now all her pain in the right iliac fossa. The parents were now sure the child had appendicitis and wanted her removed to hospital. On the following day when the child was now much better, I referred her to hospital and she was put on the waiting list for removal of appendix. I then referred the child to Professor Morris at the Royal Hospital for Sick Children who confirmed the diagnosis of cyclic vomiting and reassured the parents.

Since /

Since that time the child has had no serious return and has kept very well.

The mother was instructed to start treatment - adequate rest, reduced fats, sugar and sodium bicarbonate - immediately she saw the pre-vomiting signs and symptoms.

Family History

The parents are in good circumstances. The father is exceedingly nervous and of a worrying type. He is a member of a large family. He does not know of any similar attacks in any members of his family. The mother is a well-balanced type. She is the oldest of a family of three. Her mother states that there is no history of such attacks in the family.

CASE 24 J. R. (twin)Born 29:3:42

Breast fed three months; teething ten to eleven months; walking eighteen months.

History

Healthy baby; five and a half pounds at birth. Has suffered from recurring attacks of heat spots since five to six weeks old. Before the heat spots came out the child would be restless, fretful, constipated and off food. The spots lasted two to three days then faded.

On several occasions following these attacks she suffered from attacks of sickness usually lasting one to two days then clearing. She has been violently sick for the past two days vomiting every hour or so.

Examination8:7:42

Child very pale, is lying very quietly in bed, Temperature normal, pulse fast, tongue furred, evidence of heat spots which are nearly gone. The abdomen is soft and palpation does not appear to cause pain. The breath smells of acetone.

Not constipated.

Treatment

Sugar and water, sodium bicarbonate and water alternatively.

9:7:42 Urine: Acetone triple positive. No other /

other abnormalities.

Sickness still the same. Mother thinks the sodium bicarbonate agrees better than the sugar. Bowels not moved. Temperature normal. Pulse fast.

Child does not look very ill.

10:7:42 Sickness stopped during the night. Wakes up every two hours or so takes a drink then goes to sleep again. Bowels moved early this morning.

Child asleep, pulse and temperature normal.

Urine: Acetone double positive.

11:7:42 No further sickness. Child taking feeds, four to five ounces every three hours.

Treatment Skimmed milk and water, one to two with added sugar. Sodium bicarbonate.

13:7:42 No sickness, bowels moving, child very content.

Treatment Skimmed milk and water, extra sugar, sodium bicarbonate. Adexolin.

Urine: Acetone positive.

15:7:42 Child progressing.

Treatment Ostermilk with added sugar, sodium bicarbonate night and morning. Adexolin, Milk of Magnesia when required.

17:7:42 Urine: clear.

Condition explained to the mother. Was advised to start treatment immediately she saw any of the early signs or symptoms.

On /

On several occasions afterwards the urine was tested when crops of heat spots were observed and always showed acetone varying from positive to double positive. There were no actual sick attacks. Treated by restricting fats, giving extra sugar, sodium bicarbonate. The urine was usually clear by seven to eight days.

13:1:43 Heat spots been troubling a lot in the past five to six weeks. Mother had noticed that during the past three to four months the child had been becoming very nervous and excitable, especially with strangers. Has been pale and off food for the past three to four days. To-day she has vomited all her feeds. Bowels did not move yesterday. Has been on skimmed milk, sugar and sodium bicarbonate for the past two days.

Examination

Child very nervous, cried all during examination and clung tightly to her mother. Temperature normal, pulse fast, abdomen difficult to examine but did not appear abnormal.

Treatment

To be put to bed (mother states that it is very difficult to keep her in bed as she wants to be nursed all the time). Sugar and water, sodium bicarbonate and water alternatively, dose of Milk of Magnesia.

Urine: /

Urine: (night) Acetone triple positive. No other abnormalities.

14:1:43 Still having bouts of sickness but at much longer intervals. Was sick three times after I saw her yesterday and twice sick and one attack of dry retching during the night. Sickness usually watery bile-stained glut. Bowels moved this morning.

Temperature normal, abdomen appeared normal but further examination was impossible as the child would not remain quiet.

Treatment Same.

15:1:43 No further sickness. Taking all its feeds. Is sleeping a lot. Woke twice during the night, took full bottle of sugar and water the first time and the same of sodium bicarbonate the second, and slept to 7.30 a.m. when she had another feed which has stayed down. Bowels moved.

16:1:43 Urine: Acetone double positive.

17:1:43 No further sickness, child much more content. Has cut two lower incisor teeth.

Treatment Skimmed milk, sugar, sodium bicarbonate.

Adexolin.

18:1:43 Urine: Acetone positive.

19:1:43 Child progressing, no sickness, bowels moving.

Treatment Skimmed milk, non-fatty foods, sugar, sodium /

sodium bicarbonate.

22:1:43 No further sickness. Child progressing.

Treatment Ordinary diet. Sodium bicarbonate night and morning.

Urine: Acetone a trace.

25:1:43 Urine: clear.

Since she has had several attacks of heat spots, gets restless, goes off food and becomes very constipated; no further sick attacks. Clears up in two to three days on treatment.

CASE 25 M. R. (Twin)

Born 29:3:42

Breast fed three months; teething seven to eight months; walking fifteen months.

History

Healthy baby. Beyond recurring attacks of heat spots (treated the same as her sister) she has been a healthy baby.

29:12:43 For the past two to three days has been very restless and feverish at night following a bad attack of heat spots. She developed a cough on Monday night (27th) and yesterday started being sick after a bout of coughing. Now she is being incessantly sick, attacks coming on every one to two hours. She has become very drowsy.

Examination

Child lying quietly in cot. Temperature 100.4 degrees. Pulse rapid. Respiration 28. Breath smells strongly of acetone. Evidence of heat spots which are receding. No abdominal tenderness. Tongue furred. Beyond increased coarseness of breathing nothing abnormal in chest.

Treatment

Sugar and water, sodium bicarbonate and water, Kaolin poultice to back of chest.

Urine: (night) Acetone triple positive. Albumen a trace; no sugar.

30:12:43 /

30:12:43 Sickness less usually only after attack of coughing when she vomits some bile-stained watery mucus, then appears better and takes three to four ounces of sugar and sodium bicarbonate and then lies quietly till next attack of coughing. The bowels are moving freely. Temperature 99 degrees. Pulse rapid. Respirations 24. No areas of dullness in the chest. No abdominal tenderness or rigidity. Tongue furred.

Treatment Same.

Urine: (night) Acetone triple positive; albumen a trace.

31:12:43 Been no sickness since late last night. Child very thirsty. Bowels still free. Cough not so troublesome. Child more 'alive'. Wants to sit up in cot. Temperature and respirations normal, pulse fast.

Treatment Equal parts of skimmed milk and water, sugar, sodium bicarbonate. Poultice stopped. Gamgee jacket. Mixture of Tinc. Opii Camph. and Syr. Scillae.

Urine: Acetone double positive; albumen a trace.

2:1:44 Child progressing. No sickness. Very little cough. Sitting up in cot playing with toys. Diarrhoea stopped. Bowels not moved to-day. Pulse, temperature and respirations normal.

Treatment /

30:12:43 Sickness less usually only after attack of coughing when she vomits some bile-stained watery mucus, then appears better and takes three to four ounces of sugar and sodium bicarbonate and then lies quietly till next attack of coughing. The bowels are moving freely. Temperature 99 degrees. Pulse rapid. Respirations 24. No areas of dullness in the chest. No abdominal tenderness or rigidity. Tongue furred.

Treatment Same.

Urine: (night) Acetone triple positive; albumen a trace.

31:12:43 Been no sickness since late last night. Child very thirsty. Bowels still free. Cough not so troublesome. Child more 'alive'. Wants to sit up in cot. Temperature and respirations normal, pulse fast.

Treatment Equal parts of skimmed milk and water, sugar, sodium bicarbonate. Poultice stopped. Gamgee jacket. Mixture of Tinc. Opii Camph. and Syr. Scillae.

Urine: Acetone double positive; albumen a trace.

2:1:44 Child progressing. No sickness. Very little cough. Sitting up in cot playing with toys. Diarrhoea stopped. Bowels not moved to-day. Pulse, temperature and respirations normal.

Treatment /

Treatment Skimmed milk, non-fatty foods, sugar, sodium bicarbonate, Adexolin.

3:1:44 Urine: Acetone positive; no albumen.

4:1:44 Child progressing.

Treatment Ordinary diet. Sodium bicarbonate night and morning.

7:1:44 Child well.

Urine: Clear.

At this time I advised the mother to give both girls a small dose of sodium bicarbonate daily.

At time of writing both children have progressed very well. There has been no recurrence of bad heat spots or sickness. Both are taking a normal diet. Have now good colour. Have cut all their teeth without upset.

Home surroundings are good. Children well cared for. Father is a sergeant of police and appears a normal type of person. No history of similar attacks as far as he knows in his family. He had married twice. Three children by the first marriage are all healthy and to my knowledge have never suffered from cyclic vomiting. He is not a member of a large family. The mother is a worrying type, is a member of a large family. As far as she knows she never suffered from cyclic vomiting in childhood. (Both are related - half cousins.)

CASE 26 I. M.Born 10:10:37

Breast fed; teething ten months, rest slow; walking fifteen months.

History

Since he was put off breast he has always been "fiky" about his food. His mother has noticed that eggs and tomatoes do not agree with him. She always knew when he was going to have an attack, he would become restless, not sleeping well and often feverish and sweating at night, but by morning he would be quite cool again, would not want food but was very thirsty and drunk a lot of cold water, was constipated and usually had a dose of Milk of Magnesia. He never suffered from heat spots and up till this attack had not had sickness. He has always been a very nervous and excitable child "like his father". The only other illnesses he has had have been two attacks of croup, one when he was about two years the other when he was three years and four months.

For the past three to four days he has been very excitable, off food and unable to go to school. For the past two days he has been violently sick. Sickness coming on "wave after wave".

2:10:42 He is a typical cyclic vomiting child - small build, thin, bright-eyed, clear skin child, his face /

face is flushed and he is lying quietly in bed. His pupils are dilated, tongue is furred, breath smells strongly of acetone (the mother stated that when he is upset his breath always has that sweet smell, she thought it was coming off his stomach and usually gave him a dose of Milk of Magnesia, which seemed to help it). Temperature 102.2 degrees, F, pulse rapid, no cough, no abdominal tenderness, no enlargement of the liver, no head retraction. The vomited material appears to be bile.

Treatment Sips of sugar and water alternatively with sips of sodium bicarbonate and water, dose of Milk of Magnesia. To be kept very quiet.

3:10:42 Urine: Acetone triple positive; no other abnormalities. Sickness much less. Developed diarrhoea during the night, bowels moving every two hours or so. Temperature 100.8 degrees, F, pulse rapid. No abdominal pain or tenderness. Breath still smells of acetone. Pupils dilated.

Treatment Same. No Milk of Magnesia.

4:10:42 Urine: Acetone triple positive. Sickness stopped. Bowels still free. Child very thirsty. Wants out of bed. Temperature normal. Pulse fast. Acetone not smelt in breath.

Treatment Increase the number of sodium bicarbonate drinks, fewer sugar ones. Still to be kept in bed.

5:10:42 /

5:10:42 Sickness and diarrhoea stopped. Bowels not moved since last night. Slept all night. Appears much better. Very friendly and wants me to allow him out of bed.

Treatment Skimmed milk, non-fatty foods, extra sugar, sodium bicarbonate.

6:10:42 Urine: Acetone positive.

8:10:42 Appears well.

Treatment Allowed out of bed. Ordinary diet.

Adexolin. Sodium bicarbonate night and morning.

10:10:42 Urine: Acetone a trace.

17:10:42 Urine: Clear.

Back at school.

Mother advised about the condition. To start treatment early. To ensure adequate rest and avoid over-excitement and over-tiring.

Have seen him on two subsequent occasions, on both occasions associated with going back to school, off food and very excited, no sickness. Urine on both occasions showed acetone double positive, clearing up with rest and diet in seven to ten days. He is still receiving small doses of sodium bicarbonate.

The father is a very excitable type, is a member of a large family. The mother is a normal, very capable type. The children are well cared for. Home surroundings are good.

CASE 27 W. M.

Born 8:1:40

Breast fed; teething ten to eleven months; walking fifteen months.

Has always been a very nervous child, but healthy; has had no serious illness. Is very shy. Has never suffered from heat spots.

Present Complaint

Sickness and diarrhoea for the past two days.

Examination

25:10:42

Child lying quietly in bed with blankets over his head. Temperature 102 degrees F. Pulse rapid. Face flushed. Tongue furred. No abdominal pain or tenderness. No evidence of heat spots. Evidence of watery mucous diarrhoea.

Treatment Dose of Castor Oil. Barley water.

26:10:42 Condition same. Specimen of faeces sent for examination.

Night - Urine: Acetone triple positive. Albumen a trace.

Treatment Sugar and water, sodium bicarbonate and water.

27:10:42 Sickness much less, diarrhoea less, still mucus, occasionally little blood. Temperature 99.6 degrees, F. Pulse fast; no abdominal tenderness. Child looks better.

Treatment /

Treatment Less sugar, more sodium bicarbonate.

28:10:42 Urine: Acetone double positive. Albumen a trace.

No sickness. Bowels moved twice during the night, not this morning. Temperature 98 degrees F. Pulse fast.

Treatment Equal parts of skimmed milk and water, sugar, sodium bicarbonate.

30:10:42 No sickness. Bowels not moved since yesterday. Pulse and temperature normal. Child sitting up in bed and appears very well.

Treatment Skimmed milk, non-fatty foods, sugar, sodium bicarbonate.

1:11:42 Urine: Acetone positive.

Child appears well, bowels moving normally.

Treatment Ordinary diet, sodium bicarbonate night and morning.

5:11:42 Urine: Clear.

Child well.

(Result of faeces examination negative).

During the summer of 1945 this child developed a pleural effusion and is being kept under observation by the Tuberculosis Officer.

CASE 28 B. S.

Born 17:2:44

Weight six and a half pounds.

Complaint

Recurring sickness.

History

Bottle fed since birth, milk and water with sodium citras and sugar.

The baby has always been very nervous, not sleeping well and often went off food for days. Has always been slightly constipated. Cut her first tooth at five months, rest have been very slow in coming. She is not walking yet.

About the end of January, 1945 the mother stopped giving the child the sodium citras in her milk and soon after that the child appeared to become nervous, breath developed an unusual smell and she had often sick attacks. The mother states she knew when they were coming on; child became more restless, especially at night; went off food, constipation worse then she would have sickness for one to two days and then seemed better; this would be followed in a week or so by another such attack. She has never suffered from heat spots. For the past two days she has been violently sick.

Examination

8:5:45 /

Examination8:5:45

Pale, nervous, very irritable child, pupils appear dilated. Examination impossible. Her temperature is normal, pulse fast, her breath smells strongly of acetone (her mother states that is the smell her breath often has when these attacks are on, but this time it smells much stronger). There does not appear to be any apparent abdominal pain or tenderness. There is no head rigidity, the tongue is furred, there are no ulcers of the mouth and the throat appears normal.

Diagnosis

In view of the history and the strong smell of acetone in the breath the condition was diagnosed as cyclic vomiting.

Treatment

One teaspoonful of sodium bicarbonate in orange-flavoured water, small amounts to be given often.
Dose of Milk of Magnesia.

Night Urine: Acetone triple positive. No other abnormalities.

9:5:45 Child much better. No sickness since late last night. Bowels moved this morning. Child appears thirsty but is not very fond of the sodium bicarbonate drinks.

Treatment Skimmed milk and water with extra sugar, sodium /

sodium bicarbonate.

10:5:45 No sickness. Child very much better, less irritable and sleeping better at night. No smell of acetone in the breath.

Urine: Acetone positive.

12:5:45 Child progressing. No sickness. Temperature and pulse are normal. There is nothing abnormal in the abdomen. The bowels are moving. There is nothing abnormal in the chest.

Treatment Non-fatty foods, skimmed milk and sugar, sodium bicarbonate.

14:5:45 Urine: Acetone a trace.

Treatment Same.

16:5:45 Child well. Condition explained to the mother. Advised to look for the early signs. Still to keep giving the small doses of sodium bicarbonate or sodium citras.

21:5:45 Urine clear. Child well, ordinary diet. Sodium bicarbonate.

(Still under observation).

CASE 29a M. P.

Born 16:2:43

Breast fed.

Complaint

Sickness and skin rash.

History

Normal delivery. Healthy child. I was in attendance to the tenth day when both mother and child appeared to be well. The grandmother stated that the child's eyes often watered, there was never any pus and the condition was thought to be due to the Silver Nitrate put in the child's eyes at birth. There was no obvious inflammation of the eyes. From the second to third day the child vomited a little after each feed, but this was not considered abnormal and instructions were given to the mother to hold the child up after each feed to break wind. About the fourteenth day, the mother put the child off the breast and put her on to milk and water with sugar and the child appeared better for a day or so and then the sickness began again and rapidly got worse. The watering of the eyes continued and the skin round the eyes became red and scaly; this condition soon spread to the face and head. About this time the child started having loose green-coloured motions. Everything the child is taking is being vomited.

6:3:43 /

6:3:43 The child's face and head is covered with a scaly red infantile eczema. The child has evidently lost weight and appears dehydrated. The fontanelles are soft. The skin over the abdomen is lax. There does not appear to be anything abnormal in the abdomen. The food is vomited immediately it is taken, the child appears very thirsty. The motions appear green watery mucus.

Diagnosis

As the mother is a very young nervous girl and the marriage had taken place only recently, and as she was living with her parents who were very upset, and that the breasts had been very full while she was feeding the baby, and the baby had been overfed in the early stages when the vomiting started, the condition was diagnosed as a gastritis. There is a family history of cyclic vomiting, but as there were no other suggestive signs and I could not smell acetone in the breath, the condition was not regarded as cyclic vomiting.

Treatment Sips of boiled water.

7:3:43 Condition same, water stayed down short time and then vomited. Motions still loose and green. Eczema spreading to the arms and legs. Child deteriorating.

Treatment Half strength saline.

Night /

Night Condition the same.

8:3:43 Child still vomiting and the eczema spreading.

Breath smells of acetone.

Treatment Sips of sodium bicarbonate and water alternately with sips of sugar and water.

Night Condition the same. Eczema spread to buttocks.

9:3:43 Referred to Stirling Royal Infirmary with diagnosis of probable cyclic vomiting and infantile eczema.

Child died on 26:3:43.

Cause of death - acute gastroenteritis and acute dermatitis.

CASE 30

Hospital Report

Age one month. Date of admission 13:3:45.

History

Since fourteen days ago, child has been vomiting up each feed and has been losing weight and is not thriving. The child has also been very constipated and is always voraciously hungry, sucking fingers between feeds. Full term, normal delivery, bottle fed.

State on admission

The child is definitely marasmic in appearance with lax, dry skin. Fontanelle depressed slightly. No mass felt in the abdomen.

C.V.S. and R.S. - N.A.D.

Birth weight - six and a half pounds.

Admission weight - six pounds.

Transferred for operation.

Note This case is submitted as being of interest in the "D" series. He is the second illegitimate child of Mrs H., daughter of H. D.

CASE 31 E. L.Born 1:7:37

Breast fed four months; teething eleven and a half months; walking twelve months, 3/3.

3:9:43 Severe sickness.

History

He is on holiday with friends in the village. Started being sick in the bus and has been sick all night and this morning. Was born in Glasgow and now staying near Coatbridge. Ever since he was about six to seven months old he has had repeated attacks of sickness. When they started first they were supposed to be due to teething. These attacks usually last one to two days and then he is all right again. In October 1941 he had a very bad attack soon after going to Coatbridge; sickness lasted about a week and he was very ill. After this attack he "picked up" very quickly. His mother thinks he will have had about ten to twelve attacks up till now. He has always been an exceedingly nervous and excitable child. He has suffered from heat spots since he was a baby. (date not known). The only other illness he has had was an ulcerated mouth when he was about eighteen months old. He always keeps very pale. Before an attack comes on he gets very excitable, restless at night, comes out in heat spots, gets /

gets very hungry then off food then he starts being sick.

His sister (1/3) suffered much the same when she was a baby but "grew out of them when she was about seven years". Her attacks were never so severe as his.

Examination

He is a thin, small, nervous type of child, he looks pale and his pupils are dilated. His breath smells strongly of acetone. His tongue is furred. Evidence of numerous heat spots which are dying down. Temperature normal, pulse fast (probably due to struggling and crying). Nothing abnormal found in the abdomen. Chest appears normal.

Night Urine: Acetone triple positive. No other abnormalities.

Diagnosis

Cyclic vomiting.

Treatment

Sips of sugar and water, sips of sodium bicarbonate and water. Dose of Milk of Magnesia. To be kept very quiet, no visitors.

4:9:43 Little fluid stayed down, but still very sick. Bowels moved. Child appears much the same.

Treatment Same.

Night Urine: Acetone triple positive.

5:9:43 /

5:9:43 No sickness since 10 p.m. Slept well during the night, wakening often and asking for drinks. Has drunk a lot of fluid and now wants food. Is not so irritable and allowed me to examine him. Urine: Acetone double positive.

Treatment Skimmed milk, biscuits, sodium bicarbonate drinks.

7:9:43 No further sickness. Child wants out of bed. Appears much better. Urine acetone positive; pulse and temperature normal; pupils dilated when I went in but soon returned to normal. Tongue clearing. No signs of irritability but rather inclined to be talkative.

Treatment Non-fatty foods; sodium bicarbonate drinks; adequate rest.

9:9:43 Seen at the surgery; child appears well; taking food well; still pale; pupils still fluctuating. Going home on Sunday (12th). Urine: Acetone a trace.

12:9:43 Started being sick during the night. Did not sleep so well on Friday night, was "hanging" yesterday. Did not want out to play with other children, off food, bowels moved twice last night before the sickness started.

Urine: Acetone triple positive.

Condition explained to the mother. Avoid undue excitement /

excitement, adequate rest. Start treatment immediately she saw the early signs. Went home in the afternoon by car. Was informed by relative that he was all right again by Tuesday.

CASE 32 I. S. (Sister of Case 20)

Born 3:5:43

Breast fed six months; teething eleven months; walking ten and a half months.

7:8:44 History

Off food and sickness.

For the past two to three months has been having little sick attacks usually lasting about one day. Treated same as her brother by putting her to bed and giving her glucose and sodium bicarbonate drinks. She has suffered from heat spots since she was about one year old. Both she and her brother have been having small doses of sodium bicarbonate two to three times a week since her brother had his last attack. She is a nervous child but not so bad as her brother who still gets very mild attacks after any excitement.

The mother has noticed that before these attacks come on the child sits a long time on her chamber before passing water. She gets restless at night with heat spots, goes off her food and wants to drink lemonade only. If the mother starts treatment at this stage she can usually prevent the sickness from coming on. She is keeping very pale and very shy.

She has been sick now for two days.

She is a pale child with large bright eyes, pupils are dilated. She is very shy but not the crying /

crying type. She is quite well developed. Pulse and temperature are normal; evidence of heat spots which are going back; tongue is furred. Nothing abnormal found in chest or abdomen. Constipated. Room smells of acetone, breath strongly so.

Diagnosis

Cyclic vomiting.

Treatment Same as being given by the mother. Dose of Milk of Magnesia. To be kept very quiet by herself.

Night Urine: Acetone triple positive. No other abnormalities.

7:8:44 Still being sick but not so frequently; twice during the night and once this morning.

Appears more settled. Lying quietly in bed. Pulse fast. Temperature normal. Still very pale. Pupils dilated; breath still smells of acetone but not so strongly.

Treatment Same.

Urine: Acetone triple positive.

8:8:44 No further sickness since yesterday afternoon. Is very thirsty. Slept well. Pulse and temperature normal. Child very friendly.

Treatment Skimmed milk, biscuits, glucose and sodium bicarbonate.

Urine: Acetone positive.

10:8:44 /

10:8:44 Child progressing. No further sickness.

Taking food well.

Urine: Acetone positive.

13:8:44 Child well. Out and about.

Urine: Acetone positive.

Treatment Ordinary diet, reduced fats. Sodium

bicarbonate. Adequate rest.

16:8:44 Urine: Clear.

The urine was examined on the following dates:-

23:8:44 Clear

7:9:44 Clear

7:10:44 Clear

13:10:44 Acetone double positive; heat spots
and off food

14:10:44 Acetone double positive; much the
same.

15:10:44 Acetone positive; much better.

17:10:44 Acetone a trace; child better.

23:10:44 Acetone clear.

30:10:44 Clear

23:12:44 Acetone positive; catarrhal cold.

26:12:44 Acetone positive.

29:12:44 Clear

26:1:45 Clear

14:4:44 Clear

Both she and her brother still get small doses of sodium bicarbonate twice weekly. The dose is increased if they show any suggestive signs. Heat spots /

spots have been much less frequent. No further attacks of sickness.

She is still very pale and shy but keeping well.

CASE 33 J. B.

Born 10:7:44

Breast fed one month; teething ten months; walking twelve months.

Previous History

Has always been a very nervous child and a difficult child with strangers. He has thrived well until recently. He has never suffered from heat spots.

Present Illness

Has been off his food for the past three to four days, has been very irritable and restless and not sleeping well at nights. He started being sick yesterday and has gradually got worse. To begin with he was sick following his food but now he is being sick even without food. The bowels have not moved since the sickness started.

17:12:45 The child is lying quietly in bed. He looks pale. His breath smells strongly of acetone. He appears to be breathing quietly. His mother states he has been sleeping for the past three-quarters of an hour since his last attack of sickness when he brought up some bile-stained glutty material.

His temperature is normal and the pulse is not fast. On being disturbed he started crying, had to be lifted by his mother and further examination was impossible. /

impossible. He appeared a well-developed child. His pupils were dilated.

Diagnosis

The history, family history and strong smell of acetone pointed to a case of cyclic vomiting.

Treatment Sips of sodium bicarbonate and water, sips of sugar and water alternatively, later a dose of Milk of Magnesia.

Urine: Acetone triple positive; no other abnormalities.

18:12:44 Has had a fairly good night. No further sickness. Bowels moved several times.

Treatment Same; more being given.

Urine: Acetone double positive.

19:12:44 No further sickness, child much brighter, very hungry. Child still very fretful, and cried a lot on attempted examination, pupils still dilated.

Treatment Skimmed milk and water with extra sugar; sodium bicarbonate drinks night and morning.

Urine: Acetone double positive.

20:12:44 Urine: Acetone positive.

21:12:44 Child appears well but still cries on attempted examination. His mother states he is taking his food well and sleeping well. Bowels moving.

Treatment Ordinary diet. Sodium bicarbonate drinks /

drinks night and morning.

24:12:44 Urine: Acetone a trace.

28:12:44 Child well.

Urine: Acetone a trace.

4:1:45 Child thriving.

Urine: Clear.

Subsequent History

At the beginning of February the child again became very irritable, restless and off his sleep but no sickness. The urine showed acetone double positive. He was put on a non-fatty diet with extra sugar and sodium bicarbonate.

No sickness developed and the urine was clear by the end of the week. He was put back on his ordinary diet and to be given a little sodium bicarbonate every second or third day.

About the middle of May he was in contact with and developed measles. His fats were reduced, was given extra sugar and sodium bicarbonate.

The urine never showed any acetone.

He is so far an only child.

His mother is a member of the "D" family (see "D" family history) and gives a history of sick attacks in childhood.

His father is not a member of a large family. He is an engineer. The home surroundings are good. The child is very well cared for.

CASE 34 W. G.Born 12:10:44

Breast and bottle fed; teething eleven to twelve months; walking twelve months.

Previous History

Has been subject to sick attacks since he was two to three months old. The attacks usually lasted for two to three days and then he would pick up again. The mother could not state the number of times or the length of time between the attacks. She did not think they were very serious as his older brother had been much the same when he was a baby, and she had been told that the child was subject to bilious attacks and that her husband had had them when he was young. The last attack was about three weeks ago just before they had left their last farm to come here. It had lasted about two days.

Present Complaint12:3:46

Sickness. The child is a thin, nervous boy and is not very clean. Temperature 100.2, pulse is fast; he has an annoying cough and his eyes are watery. There is no evidence of any heat spots. His breathing is fast and his breath smells of acetone. His mother states the bowels moved this morning after a dose of Syrup of Figs last night.

The urine was examined that night and showed acetone /

acetone triple positive. The mother was advised to put the child on sugar and water and sodium bicarbonate and water alternatively. (She stated she had no sugar in the house and a prescription for glucose was given).

13:3:46 The child showed a well marked measles rash. The child is still being sick after coughing. The bowels have not moved.

Treatment Same.

14:3:46 Occasional sickness after coughing. Generalised rash.

Treatment Same. Mist. Opii Camph.

16:3:46 No sickness. Bowels moving. Cough still troublesome.

Treatment Skimmed milk, extra glucose, sodium bicarbonate.

Urine: Acetone positive.

19:3:46 Child progressing. No sickness. Rash fading. Still occasional cough.

Treatment Ordinary diet. Sodium bicarbonate night and morning.

Urine: Acetone negative.

Home surroundings very poor. He is the second of two children. Mother is rather an indifferent type of person. Father is a nervous type who never seems to be very long in the job.

CASE 35 A. R.Born 23:9:40

Bottle fed; teething eleven months; walking thirteen months.

History

Since she was a baby she has suffered from heat spots. Has always been a very nervous and tired child, and has been difficult to rear - never being able to get a food which agreed with her. Most of the proprietary foods have been tried; they would agree with her for varying lengths of time and then she would go off them - she would start going off her feeds, get very bad attacks of heat spots and then start being sick and vomiting all her feeds. She usually only vomited when she took food and seemed better when she had no food in her stomach. At these times she nearly always also got constipated, but occasionally had green diarrhoea. A change of food usually righted things for a bit. The food that suited her longest was Sister Laura's food.

13:8:41 Vomiting all her feeds.

She is a small pale, thin child. She vomited her 10 a.m. feed immediately she took it and has been sleeping for the past three-quarters of an hour. She is covered with heat spots which appear to be receding, the mother states that the heat spots came out /

out three to four days ago and she has been very restless and off her sleep. Child's breath smells strongly of acetone. Pulse and temperature are normal. The fontanelles appear normal. The abdomen appears normal. Bowels had not moved. Mother states child has no teeth.

Diagnosis

Cyclic vomiting. Asked the mother to try to get a sample of urine.

Treatment Child to be kept very quiet in bed, sips of glucose and water and sips of sodium bicarbonate and water. Dose of Milk of Magnesia.

14:8:41 No sample of urine got. Child still very restless and having attacks of retching, but no actual vomiting. Bowels moved twice; crying a lot. Child appears much the same; examination was impossible as child cried all the time. Mother gave child about four tablespoonfuls of sugar and water slowly, about half a teaspoonful at a time. During the time I waited it was not vomited and the child seemed very thirsty.

Treatment Same.

Night Urine: Acetone triple positive. No other abnormalities.

15:8:41 No further sickness, child sleepy, keeps waking up and taking drinks, then going to sleep again /

again. Did not disturb child.

16:8:41 No sickness, bowels moving. Was lying quietly in cot but started crying when I went over to it. Little evidence now of heat spots, tongue clean. Abdomen appeared normal between bouts of crying.

Treatment Equal parts of skimmed milk and water with glucose. Sodium bicarbonate drinks. To be kept quiet in bed.

Night Urine: Acetone double positive.

18:8:41 No sickness; teeth showing through gums. Child more content.

Treatment Same with rusks and biscuits.

20:8:41 Child progressing; teeth nearly through.

Treatment Adexolin and orange juice added to feeds. Fats in diet to be restricted.

24:8:41 Urine: Acetone a trace.

Child progressing - two lower incisor teeth.

29:8:41 Urine: clear.

Condition explained to mother. Treatment with glucose and sodium bicarbonate to be started immediately she saw early signs. Adequate rest and avoid excitement.

9:11:41 Since last attacks child has been well with occasional attacks of heat spots, which cleared quickly when fats stopped and glucose and sodium bicarbonate given. She has now developed sickness.

Has /

Has had bad attacks of heat spots for past three to four days; was put on skimmed milk and glucose and sodium bicarbonate drinks. Mother states that she has difficulty in getting child to take sodium bicarbonate drinks. She is very restless at night, has gone off her food and has vomited both her feeds this morning. The mother noticed that yesterday her breath had the unusual smell again.

Urine: Acetone triple positive; no other abnormalities.

Examination

Is impossible, the child cried and struggled until she was sick, when she vomited up some watery mucus. This was followed by some dry retching. She then lay back in the cot exhausted. There were signs of heat spots all over the body and her tongue was furred. No attempt was made to examine her. The breath smelt very strongly of acetone, and so did the vomited material. She had had a small drink of glucose and water about a quarter of an hour before I saw her.

Treatment Advised putting her into room and drawing curtains and keeping place very quiet. To keep giving the glucose and sodium bicarbonate.

10:4:41 Sickness less but still coming on if she wakens up with a start on hearing any noise. It is usually /

usually just what she has had. If she keeps the food down more than half an hour she seems better. She is being fed every two hours, and gets about a cupful in all at each feed, given very slowly. Did not disturb the child.

11:4:41 Still an occasional attack but is much more content. Child cried when I went in, but I made no attempt to examine her.

Night Urine: Acetone triple positive.

12:4:41 Urine: Acetone triple positive. No further sickness.

Treatment Same.

13:4:41 Child sitting up, cried when I went in; after some time allowed me to take her temperature and pulse. Pupils dilated, abdomen appeared normal. Heat spots hardly visible; on asking to see her tongue, started crying again.

Treatment Skimmed milk, extra sugar and sodium bicarbonate drinks, biscuits, etc.

14:4:41 Urine: Acetone double positive.

15:4:41 No sickness; child eating well; wants a lot of nursing.

17:4:41 Urine: Acetone positive.

18:4:41 Child progressing.

Treatment Usual diet, restricted fats, sodium bicarbonate night and morning.

20:4:41 Urine: Acetone clear

26:4:41 Urine: Acetone clear.

Urine /

Urine was examined on:-

13:6:41 Acetone positive; heat spots.
19:6:41 Clear
3:8:41 Clear
7:8:41 Acetone double positive; heat spots,
 dry vomiting, very restless.
18:9:41 Clear
11:1:42 Acetone double positive; heat spots,
 off food, very pale, listless.
13:1:42 Acetone positive.
16:1:42 Acetone positive.
19:1:42 Clear
7:3:42 Acetone positive; heat spots.
10:3:42 Acetone a trace.
13:3:42 Clear
5:8:42 Acetone positive; no heat spots but
 "hanging" and off food.
10:8:42 Clear
6:11:42 Acetone double positive; off food,
 dry retching, pale and appears very
 tired.

Has been very excitable since baby was born. Ran
 and hid any time nurse or I went into house; usually
 behind cupboard door.

15:11:42 Urine clear.

Similar attacks continued up till summer of 1945.
 Since then she has been free. She is still a typical
 looking cyclic vomiting child, small, thin, pale,
 very nervous child. She looks at me very shyly when
 I meet her in the village and usually runs and hides
 until /

until I go away, even though she is out playing with other children who don't worry at all about me, and who, by the time I come out of the house, have been all over the car drawing lines or writing on the body of the car, or talking to my dog through the window. Her clean and tidy habits are usually markedly evident compared with these other children.

Her mother is a nervous worrying type of person; she attends her home and her children very well. She is a member of a large family; has false teeth. She does not know of any other cases in her family.

Her father is a miner; he is a member of a large family, many of whom I know. There are no other cases on his side. He appears a normal type.

The oldest child, a boy, has never suffered from heat spots or sickness and appears a normal type of child.

CASE 36 A. R.Born 10:10:42

Teething twelve to thirteen months. Bottle fed; walking seventeen months.

Since birth she has suffered from heat spots. Occasionally she has had attacks of sickness, never very severe, usually lasting about one day, then she seemed all right again. She did not vomit all her feeds on these days - after she was laid down she would vomit up her feed. The mother usually put her on sugar and water for a day and she was all right after.

7:3:43 She has had a very bad attack of heat spots and been sick for past two days. Her face is now out in a rash. It started behind the ears and spread over her face and neck. She has been fed on Sister Laura's food since birth. He has been fed on glucose and water and sodium bicarbonate and water for the past two days and had a dose of Milk of Magnesia.

Examination

Child's face is covered with a wet eczematous rash, pulse and temperature normal, breath smells strongly of acetone. There are heat spots scattered over trunk; tongue is furred.

Treatment

Sugar and water, sodium bicarbonate and water.

Mask /

Mask to be made for face and Ichthyol 1%, Zinc Oxide 10% paste applied. Skin to be cleaned with liquid paraffin.

Night Small sample of urine was loaded with acetone.

8:3:43 Condition same.

9:3:43 Sickness stopped, eczema still active.

Treatment Same - dressing to be done by district nurse

10:3:43 Urine: Acetone double positive.

11:3:43 Sickness stopped, child taking food well.

Eczema still active.

Treatment Skimmed milk and water, extra sugar and sodium bicarbonate.

12:3:43 Face drying.

14:3:43 Urine: Acetone double positive.

Eczema keeping dry and healing.

Treatment Same. Adexolin given and orange juice.

3:43 Eczema progressing.

Treatment Same.

18:3:43 Urine: Acetone positive.

Eczema progressing.

21:3:43 Face clearing; still inflamed behind the ears.

24:3:43 Progressing.

26:3:43 Urine: Acetone positive.

27:3:43 Evidence of eczema behind the ears. Child taking food well and appears content.

1:4:43 /

1:4:43 Progressing.
6:4:43 Progressing.
10:4:43 Little evidence on face; behind ears still
red.
13:4:43 Urine: Acetone positive.
18:4:43 Skin clear.
Treatment Still having extra glucose and sodium
bicarbonate.
24:4:43 Urine: Acetone positive.
1:5:43 Child well.
Urine: Acetone a trace.
12:5:43 Urine: Acetone a trace.
19:5:43 Urine: Clear

She has had four similar attacks since. The last attack was in January, 1946. The history is always the same - heat spots, off food, restless, sickness, then eczema of face and head. She has developed into a typical cyclic vomiting child, thin, pale, tired, very nervous and for first three to four days of attack cries all the time I am in. The urine shows acetone present long after the eczema has cleared. She has had no other illnesses.