

Historical Perspective

Outbreak of Cerebrospinal Meningitis in Gozo in 1887

Manuscript Report dated 31st May 1887

B. Mercieca

Sir

In obedience to the verbal instructions of His Honor the Lieut: Governor to give a report on the disease which made its appearance in February last, amongst a family, in the Village “ta Sannat” in Gozo, I have the honor to submit what follows.

2. I must premise, that in the study, and examination of the disease in question, besides the assistance of the District Medical officer of Rabat, and of the Resident Assistant of the Hospital, I have had the valuable opinion of Professors Galea and Pisani, as well as of the Army Surgeon Drs Reed and Coats, all of whom unanimously characterized this dreadful disease as “Cerebro Spinal Meningitis”.
3. I do not think that that disease can be called “Epidemic” *fforas new* cases, will have made their appearance in other localities of the island; but it is certain that it has the same distinctive marks of that disease, as described by several authors, and observed by Drs Reed and Coats, during an epidemic which prevailed, I think, in Dublin.
4. As it is the case with other countries, no satisfactory result whatever has been arrived at in Gozo, as to the cause of the disease. The spot where the cases broke out, was inspected; the food and the water used by the patients were examined, as also there external relations ecc but all to no avail.

5. When the disease broke out the general state of health in the island, was very good: and no epidemic prevailed at the time.
6. Much noise has been made here at Gozo, on account of a quantity of cellular & connectives tissue of a breast of a cow which had been eaten during Carnival as the cause of the disease. Although we were not in time to examine these tissues, still I as well as the other medical gentlemen, retained this doubt as groundless, first, because these tissues were of a fat cow slaughtered, a day before, at the public abattoir, and sold at the market, without any sort of complaint, having been made by the public; and secondly because the cow had not suckled since eleven months, and had not been milked since three. That meat had been boiled and fried. Besides the patients, the father and the youngest daughter, other five of their relatives, one of the neighbours, and also a dog, had partaken of that food, without complaint of any ailment on their part. Finally from the day, on which the above individuals had eaten the meat in question, until the last attack, eleven full days had elapsed, and therefore, if the first attack could eventually have been produced by the use of that meat, the other attacks could not be attributed, to that same cause, because the necessary time for its digestion and assimilation had long passed.
8. With a view of rendering easy their description, the cases observed, may be considered under two -forms; vir - one acute or fulminant – (Meningite foudeyan Niemeyer), and the other intermittent (Niemeyer) and of long duration.
9. In the acute *form* the disease began all at once with a strong characterized shivering fit and shakes throught the body so violent and painful that one of the patient begged the persons present to place upon *him* large stones in order to not move. After the shivering fits, which sometimes lasted for an hour, the patients felt themselves relieved, for except a light fever, 103F and a little headache, pane at the neck and distant retching, the patients did not feel any other pain, on the contrary they have had sometime the benefit of a little sleep. The intellectual facilities of the patients remained sound. However after strong tetanic shakes in the muscles of the back overcame, the head was drawn backwards, the respiration and the pulse became very slow, and the face earthy coloured then a profound coma ensued and after a

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few minutes death followed.

10. I happened to be present at the death of one of the patients attacked under the above form, and I can assure, that I remained terrified owing to the almost fulminating manner in which that patient was caught, whilst apparently he was looking well and held a regular talk with me.
11. Three died of the disease under this form & their ages were between 18 and 27 years.
12. Under the intermittent form, no premonitory symptoms appeared. The disease began also with shivering fits, which however, *were* not so strong as the above mentioned. After few hours, the following symptoms appeared, viz - high temperature, cefalalgia, dilatation of the pupil, pains at the neck and in the throat, disphagia, general cutaneous hyperaesthesia and gastralgia accompanied by bilious vomiting and by diarrhoea. On the second and thart day these symptoms became more intense, fever was between 103° and 105°F, then followed a delirium more or less acute, which in the case of a young woman became so vaiolent and furious, as to render two nurses necessary to keep her in bed; loss of consciousness, more or less intense; convulsions; - trismus - costant contraction of the muscles of the back causing the drawing of the head backwards with deepening of the cervical portion of the spine. This symptom was very much characteristic & constant.
13. On account of the great alteration of nutrition other symptoms were observed viz - a marked emaciation; - all tissues became flaccid, and of a very pale color; - physiogonomy resembled that of old peoples; and a vesicular eruption was formed around the mouth.
14. In the case of the woman aged 27 years after six or seven days, her eyeballs became much ignited, symptoms came in; suppuration followed, which ended in the total destruction of the eye-balls and complete blindness.
15. With these ailments, the patients went on for eight days. Then these symptoms decreased a little in intensity for one or two days, and again after there were a relapse preceded by the rising of temperature.

16. In these circumstances the patients continued for a long time. The elder, then after the exacerbation she had at the beginning of April never got well and on the 4th of that month died. The mother continued in the same state and on the 7th of May died also.
17. Lastly, in the other two patients, aged 8 and 13, who have had the fortune of escaping from the dreadful struggle, the simptoms diminished at the middle of April, and at the end of that month convalescence began and on the 15 of May, they discharged from hospital perfectly cured.
18. In the several post-mortem examinations, the following notes have been observed viz:- Large bluish hypostatic cadaveric spots; - in the acute cases these spots were not only seen in the lower parts of the body but also in the upper ones. In one of the acute cases hemorrhagic papulae were in great number, - in chronic cases great emaciation. In all cases rigor mortis well marked; hyperemia in the structures within the cranium; the sinuses of the dura-mater contained much fluid and softy coagulated blood; the arachnoid membrane adherent and of opalaine colour especially at the fissure; the subarachnoid space always contained an excess of serum with effusions of blood in the cerebral circonvolutions. The cerebral substance softened and vascular. The lateral ventriculi more or less full of opalin exudation; - medulla allungata vascular and hardened No sort of exudation was ever found in the vertebral column;- all the other organs in the thorax and abdomen were highly congested.
19. The treatment in all the cases has been generally reconstituent and sedative - Broth, Beef-tea & Portwine were given in large scale. At the outbreake of the disease, aperients and cold lotions on the head *were* prescribed. Afterwards sedatives such as opium & chloral hydrate, but the best results were attained throw hypodermic injection of morphia.

I have the honour

B. Mercieca

Note

This manuscript is being reproduced *tale quale* - without any attempt to correct orthography.

Reference

- Letter No. 130 by Dr. B. Mercieca, Medical Superintendent to Gozo Hospital to P. Trapani, assistant Secretary to Governor, Gozo dated 31st May 1887. In: *Correspondence book for Gozo Hospital from 9th February 1886 to 26 February 1889*. Manuscript [in the holding of Gozo Archives Section of the Gozo Library], fols. 121-129

Further Reading

- C. Savona-Ventura. An outbreak of Cerebrospinal fever in a 19th century British Mediterranean Naval base. *J. R. Army Med. Corps.*, 1994, 140:p.150-158