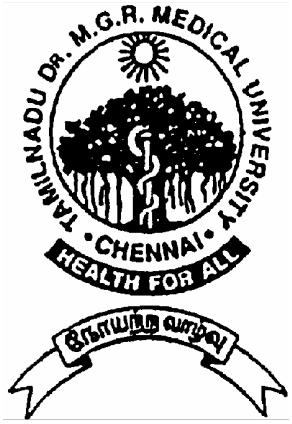
A STUDY OF TWENTY INTERESTING CASES

Submitted to

M.S Degree Examination-Branch IV

OTO-RHINO-LARYNGOLOGY

STANLEY MEDICAL COLLEGE



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CERTIFICATE

Certified that this dissertation entitled **"A STUDY OF TWENTY INTERSTING CASES"** is a bonafide work done by **Dr.S.GURUMANI**, M.S.Oto-Rhino-laryngology, Post graduate student of Department of Oto-Rhino-laryngology, Stanley Government Hospital**,** attached to Stanley Medical College, during the academic year 2004-2006.

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DECLARATION

I declare that this dissertation entitled **"A STUDY OF TWENTY INTERSTING CASES"** has been conducted by me at the Department of Oto-Rhino-laryngology, under the guidance and supervision of my chief **Prof.Jacinth Chelliah, M.S., D.L.O.** It is submitted in part of fulfillment of the award of the degree of M.S. (Oto-Rhino-laryngology) for the February 2006 examination to be held under the Tamil Nadu Dr.M.G.R Medical University, Chennai. This has not been submitted previously by me for the award of any degree or diploma from any other university.

(Dr.S.GURUMANI)

CASE - 1

A CASE OF KLAIN WAARDENBURG SYNDROME

Presenting Complaints : 8 years old male

C/o. hard of hearing, excessive aggressiveness, delayed speech

H/o. of Presenting Complaints :

Patient is an abandoned child

History of abnormality of upper limbs and chest

H/o. of delayed milestones (+)

H/o. agitation (+)

He communicates basic needs

He writes and eats with leg

He understands simple commands by gestures only.

No H/o. ear discharge / convulsions

Family history: Could not be elicited. Patient is an abandoned child.

General Examination :

Head to foot examination

Head & Neck :

i. White forelock present
ii. Cranial asymmetry
iii. Low hair line
iv. Frontal bossing

Eye Signs :

1. Poliosis of eye brows and eyelashes
2. Synophrys
3. Down slanting
4. Dystrophic canhorum
5. Heterochromia iridis

Visual acquity - Normal

Fundoscopy - Normal. No pigmentary abnormality

Ear Examination :

Low set ears

External auditory meatus - normal

Tympanic membrane - Normal and mobile

Vestibular system - clinically normal

Nose examination :

i. Small nostrils
ii. Hypoplastic alar cartilages
iii. Brood nasal root
iv. Anterior nasal examination revealed no abnormality

Throat Examination :

Mandibular hypoplasia

Full and prouting lower lip

High arched palate

IDL - normal study

Upper Limb, shoulder girdle and thorax :

i. Hypoplastic clavicles
ii. Sprengel shoulder
iii. Proximal humeral deficiency

iv. Barrel shaped chest
v. Axillary webbing
vi. Wasting of upper limb muscles
vii. Pterygium with secondary contracture of skin at elbow.

Wrist and Hand :

i. Radial club hand
ii. Fixed flexion deformity at wrist
iii. Clasped thumb deformity
iv. Fixed flexion deformity at finger inter - phalangeal joint
v. Syndactyly
vi. brachydactyly
vii. Campylodactyly

Back :

1. Wasting of shoulder muscles
2. Hypoplastic scapula
3. Lordosis

Anthropometry

	Patient	**Normal**	**Finding**
Head Circumference	48 cm	52 cm	<2 S.D.
Weight	14 kg	18 kg	<3rd percentile
Height	98 cm	107 cm	<3rd percentile

Systemic Examination

CVS - NAD
RS - NAD
Abdomen - NAD
CNS - NAD
Mental retardation.

Wasting of upper limbs, should girdle, chest muscles. Hypotonia of the upper limb muscles.

Investigations

I. audiometric evaluation

i. Delayed speech and language development
ii. Audiometric conditioning could not be done.
iii. Responds to loud low frequency sounds at 100dB/above only
iv. No response to soft calls.

impression - Bilateral profound congenital deafness.

II. Skeletal survey

i. Hypoplasia of lateral end of Rt clavicle and Rt scapula
ii. Clasped thumb on both sides.
iii. Sprengel shoulders
iv. Prominent lumbar vertebral anomaly
v. Barrel chest
vi. Proximal humeral deficiency

III. CT brain - normal study

IV. ECG, ECHO, ultrasound abdomen - Normal study

V. Karytoyping Normal 46 X Y

VI. CT temporal bone - Cochlea normal.

Opinions obtained :

1. General Paediatrician
2. Paediatric orthopaedician
3. Paediatric neurologist

4. Paediatric opthalamologist
5. Paediatric radiologist
6. Paediatric cardiologist
7. Paediatric surgeon
8. Child guidance clinician
9. Genetic clinic

Treatment given :

1. Strong hearing aids. Laser treatment and physiotherapy for muscle spasticity.

2. Reassurance and counselling given.

3. Vocational and occupational rehabilitation.

Discussion :

Waardenberg syndrome was described by Petres Johannes Waardenburg (1998-1979). He was a dutch ophthalmologist. He described the syndrome in 1951.

Waardenberg syndrome forms 2-5% of all congenital deafness.

Its incidence is 1 in 42,000

Features

(i) Autosomal dominant
(ii) Complete penetrance
(iii) Variable expressivity
(iv) Deafness (variable levels)
(vi) Partial albinism (heterochromia iridis, white forelock)
(vii) Dystopia canthorum

Classifications

I - associated with Dystopia canthorum
II - not associated with Dystopia canthorum
III - I or II associated with multiple skeletal anomalies
IV - I or II associated with Hirschsprung's disease

Genetic basis

I - 2q 35-37 denove inversion, PAX3
II - 3P14.1 - P12.3 MITF
III - PAX.3 2q 35q 37
IV - SOX-10.22q 13 (transcription factor)
EDNRD 13qz, END 3, 20q13.2 q13.3

Prenatal diagnosis is by chorionic villi biopsy and amniocentesis.

Criteria
Major criteria

1. born deaf or hard of hearing (congenital sensorineural hearing loss) (58% of individuals)

2. Brilliant sapphire blue eyes or two different colour eyes.

3. White lock of hair on the forehead

4. Immediate family member with waardenberg syndrome

5. Inner corner of the eye displaced to the side (dystopia canthorium)

Minor criteria

Patches of light or white skin
Eyebrows extending toward middle of face
Nose abnormalities
Premature graying of the hair (by age 30)

Waardenberg Type I feature

1. Dystophia canthorum
2. Craniosynostosis
3. Blepharophimosis
4. Glaucoma
5. Anophthalmos
6. Meningocele
7. Spina bifida
8. Mild mandibular prognathism
9. Hypertelorism (10%)
10. Dappling of skin
11. Laterally displaced inferior lacrymal point
12. Increased suspesibility to dacrocystitis
13. Normal to subnormal ERG
14. Fundal pigmentary abnormality
15. Cyanotic congenital heart disease
16. Synophrysis.
17. Heterochromia iridium
18. Low cut hair line
19. Broad nasal root
20. Hypoplasia of shoulder gridle, alar cartilages
21. Small nostrils
22. High arched palate
23. Hyperplasia of medial portion of eyebrow
24. White forelock (30-40%)
25. Axillary webbing
26. Poliosis (Pramature graying) 20-38% of cases
27. Hypopigmented areas 15-20%
28. Bilateral profound sensory neural loss - 20%
29. Normal vestibular function
30. Full & prouting lower lip
31. Cleft lip & palate

Waardenberg Type 2

- No dystophia canthorum
- striking vestibular disturbances
- 25% have synophrys
- 5% have poiosis
- 55% have bilateral sensorineural loss for lower and middle frequencies hypopigmented areas.

Waardenburg Type 3

Klein waardenburg syndrome
- Unilateral ptosis
- microcephlay
- frontal bossing/disproportionate skill
- mental retardation
- Retinal detachment
- down slanting palpebral fissure
- Learning disability
- Loss of self esteem
- Increased risk of rhabdomyosarcoma
- absent prepuce
- Tented upper lip
- Inner ear anomalies
- abnormal or absent organ of corti
- strial atrophy
- decreased cochlear neurons
- sprial ganglian atrophy
- thickening of basement membrane
- Multiple skeletal anamolies like campylodactyly, brachydactyly, syndactyly, permanent flexian of finger interphalangeal joint, deviated fifth finger carpal bone fusion, scoliosis, growth retardatiuon muscle hypotonia, flexian contractures & absent fifth toe.

Waardenburg Type 4

Waardenburg shah syndrome
associated with hirschsprung's disease (congenital megacolon)

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CASE - 2

A RARE CASE OF PAPILLARY CARCINOMA IN THYRO GLOSSAL CYST

Presenting complaints:-

40 year old female complaints swelling in front of upper aspect of neck- 5 years

H/o. of presenting complaints:-

Patient apparently normal 5 years back
noted a small swelling in front of the neck
small in size (size of peanut)
insidious in onset
gradually progressing to attain present state

No H/o. pain and difficulty in swallowing or difficulty in breathing.

No H/o. tremors, menstrual disturbances

Past History:- - Not contributory

Family History: No history of similar complaints in the family.

General Examination - NAD

Local Examination

Inspection - swelling 4 x 3cm in upper part of neck.
moves up on deglutition and protrusion of tongue.
Surface, smooth
No visible pulsations
skin over swelling stretched

Palpation:-

Inspection findings were confirmed swelling confined to anterior part of neck just above thyroid cartilage.

Margins well defined
Mobile not pulsatile, not compressible
Not trans lucent
Cystic consistency
No palpable lymph nodes.

Diagnosis - Thyroglossal cyst

Investigations:-

Ultrasound neck - hypoechoic shadow within cyst at sub-hyoid level. Normal cervical thyroid. No detectable nodes.

FNAC cyst - impression cystic changes in nodular goitre.

Ultrasound FNAC of thyroid - NAD

Thyroid uptake Scan

24 hour uptake - N
No significant tracer concentration in the swelling

Euthyroid status

T3 - 87 ng/dl
T4 - 8.26μg/dl
TSH - 0.92 m/u/ml.

Xray chest, Xray neck - lateral view, ECG - within N limits.

Surgical procedure

Transverse skin crease incision was made skin, superficial cervical fascia separated. Cyst was found anterior to body of hyoid bone and tract was found to extend to post 1/3 of tongue. Complete excision of track done and sent of HPE.

Biopsy report : Papillary carcinoma

Discussion

Papillary carcinoma accounts for 80% of all cases of thyroid malignancy. It is common in 40-49 years of age. It occurs in all age groups and is virtually the only thyroid cancer of children. Papillary carcinoma in a thyroglossal cyst is rare. Its incidence is 0.1%.

Histologically these cancers are divided into pure papillary mixed papillary follicular and follicular variant of papillary carcinoma. The mixed pattern is the most common with pure papillary the rarest. The papillary component is characterised by a fibrous stalk with a periphery of follicular epithelium. Laminated calcifications called psammoma bodies are often found in the stalk region. The nuclei often appear clear and are described as ground glass or orphan annie nuclei.

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CASE - 3

A CASE OF RARE TUMOUR OF THE EAR

Presenting complaints:-

35 year old male presented with mass in Rt ear - 2 years
Hard of hearing and tinnitus - 1 year.
Discharge scanty, non - foetid, serosanguinous discharge for 6 months.

Past History

No. H/o T.B / D.M/ Hypertension
No H/o Previous ENT Surgeries

Family history: No history of similar complaints in the family

Local Examination

Rt ear - non pulsatile, firm, pale polypoidal mass filling the External Auditory Canal seen.

Lt ear - Tympanic membrane intact and retracted

Nose and throat - Normal

Tuning fork tests - Rt Conductive deafness

Investigations:-

Blood - ESR 20/42 mm.

Rt ear pure tone audiogram 60 dB severe conductive deafness.

Biopsy - Chronic non - specific inflammatory granulation tissue (Malakoplakia).

CT Temporal bone - Rt temporal bone - well defined irregular heterogenous density 25-35 Housefield units with bony erosion.

Rt mastoid air cells not seen.

Procedure done:-

Rt tympanomastoid exploration Under General Anaesthesia
tegmen plate and associated squamous part of temporal bone was eroded.
Brownish growth seen arising from cartilaginous part of external auditory canal extending to middle cranial fossa superiorly and anteriorly.
Ossicles were normal
material sent for HPE.

Biopsy report:-

Consistent with chondroblastoma

Discussion

Chondroblastoma is a rare, benign, cartilagenous tumour. It occurs predominally in adolescents and young adults. Males are more commonly affected than females Grossly, the tumour is a well - defined, firm round or ovoid grey tumour. Microscopically the lesion is highly cellular and consists largely of small, round or polyhedral cells with a thick, well defined cell membrane and hyperchromatic and variably shaped nuclei. The tumors is benign and is usually cured by curettage although recurrence may follow uncompleted removal. So far only 36 cases have been recorded in literature.

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CASE - 4

A CASE OF ESTHESIONEUROBLASTOMA

Presenting complaints

24 year old female
C/o right nasal block - 6 months
C/o. bleeding from right nasal cavity - 6 months.

History of presenting complaints

Right nasal block - 6 months
Insidious in onset
progressive

H/o. right nasal bleeding - one episode

6 months back blood stained nasal discharge

H/o. mouth breathing (+)

No H/o. ear discharge / throat pain

Past history :

Patient was admitted previously and underwent biopsy.
Biopsy report - esthesioneuroblastoma
No H\o T.B / D.M / hypertension.
No H\o epilepsy / bronchial asthma

Family history: No history of similar complaints in the family

General Examination : NAD

Local Examination

Nose : nasomaxillary groove oblitered.
Anterior nasal examination-pinkish, flesh mass seen in right nasal cavity.

Pedunculated firm, sensitive to touch, bleeds on touch.

Post - nasal examination : small mass in right choanae.

Diagnosis - (R) nasal cavity esthesioneuroblastoma

Patient was admitted for debulking the tumour.

Investigations :

Blood investigations-within N limits.

CT Scan-shows homogenous opacity in (Rt) maxillary, anterior ethmoids posterior ethmoids and sphenoid sinus.

Blood group - A, +ve

Procedure

FESS ↓ GA

1. Uncinectomy done
2. Middle meatal antrostomy done
3. Maxillary sinus opened and found to be normal only secretions present which was sucked out.
4. Growth seem to be attached to anterior ethmoids and some extent anterior end of middle turbinate which was removed.
5. Posterior ethmoid and sphenoid sinus opened and the tumour removed.
6. Skull base and lamina papyrecea were found to be intact.

Post operative period-uneventful. Patient was sent for post-operative Radiotherapy.

Discussion

Esthesioneuroblastoma is a rare tumour of the nose and paranasal sinuses.

It is also known as olfactory neuroblastoma or neuro-endocrine tumour. The tumour arises from stem cells of neural crest origin which differentiate into olfactory sensory cells. Biopsy shows large nests of characteristics cells separated into compartments with rosette formation. The other diagnostic findings include fibrillar intracellular background and marked microvascularity with round or fusiform cells about the size of a lymphocyte.

Only 400 cases reported in world literature.

Two age peaks are around 20 years and 50 years.

Clinical staging is as follows

Group A-tumour confined to nasal cavity

Group B - tumour involving nasal cavity & sinuses.

Group C - Extensive tumours.

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CASE - 5

A CASE OF OSTEOMA-TEMPORAL BONE

Presenting Complaints :

C/o. pain behind left ear - 2 months.

H/o. of Presenting illness :

Patient was apparently normal 2 months back then be developed pain behind the left ear.

H/o. swelling behind left ear + pain not relived by taking medication.

Investigations :

Blood investigations - within (N) limits

CT scan temporal bone - homogenous opacity in left temporal bone.

Local examination of swelling :

Swelling in left temporal region not warm
tender bony hard in consistency.

Diagnosis - Temporal bone osteoma (L)

Local examination :

Ear - Tympanic membrane intact both ears.
Nose - DSL
Throat - NAD

Operative notes :

↓LA, 2% xylocaine with adrenaline infiltrated in the post auricular region, incision made in post auricular region over the swelling, incision deepened. Swelling was exposed, edges were chiselled out using mallet and gauge swelling (osteoma) removed in toto.

Discussion

A compact osteoma appears as a well-defined usually single, although occasionally lobulated bony mass of high density. Cancellous osteomas are more rare and present as a less dense, defined mass.

They occur in the following situations.

(i) External auditory meatus - where they are asymptomatic unless they become large enough to cause obstruction with consequent hearing loss or retention of wax and skin debris.

(ii) Squama of the temporal bone-where they cause a hard bulge above and behind the binna.

(iii) Mastoid-where they are asymptomatic unless encroaching upon the facial nerve canal causing paralysis.

(iv) Petrous pyramid-where they can occur in the region of porus of internal auditory meatus.

(v) Middle ear - where they may impinge upon the ossicular chain causing conductive hearing loss.

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CASE - 6

A CASE OF GRADENIGO'S SYNDROME

Presenting complaints

35 year old patient presented to our department with
C/o. pain behind left eye - 2 weeks.
C/o. double vision - 2 weeks
C/o. left ear discharge - 2 weeks

History of presenting complaints :

Patient was apparently normal 2 weeks before then he developed left ear discharge - 2 weeks

- Profuse
- Yellowish
- Not foul swelling / blood stained

H/o. discharge on and off since childhood

C/o. double vision - 2 weeks

- Sudden in onset
- Persistent

C/o. dull aching pain behind left eye - 2 weeks.

Insidious in onset
progressive

Local Examination

Rt Ear : TM intact and retracted.

Lt Ear : large central perforation with Profuse discharge.

Nose - Deviated septum to left side

Throat - NAD

Eye : Left lateral rectus weakness (+).

Diagnosis: Chronic suppurative otitis media with petrositis (gradenigo's syndrome).

Investigations :

Blood investigations - within N limits
Xray mastoids (Lt) Ear - sclerosed
(Rt) Ear - cellular

CT Scan temporal tone

Rt temporal tone - Normal
Lt temporal tone - Mastoiditis

Left Cortical Mastoidectomy under general anaesthesia

↓Ga, patient in semi - fowler position Henle spine and MC Even's Triangle identified.

Mastoid antrum entered extensive granulations present. Entire disease and air cells upto petrous apex removed.

Cortical mastoidectomy done. Wound closed in layers.

Post - operative period

Patient improved well after surgery.

Discussion

The famous otologist of Naples, Guiseppe Gradenigo as early as 1840, described the triad of symptoms (syndrome) consisting of (i) Double vision (ii) Retro orbital pain and (iii) Aural discharge.

Because of the affliction of the temporal bone with mastoid infection, the patient had aural discharge, deafness and other symptoms of otitis media. Extension of infection causes pressure over the abducent nerve while travelling in the Dorello's canal, underneath the Grubers petroclinoid ligament which is the reduplication of dura connecting the petrous apex and the posterior and so diplopia. The infection also irritates the Gasserian ganglion in the Meckel's cave causing peri and retro orbital neuralgia.

Diagnosis is easy because of the typical triad of symptoms. Skiagram of mastoids, Towne's view and Stenver's view are helpful (which may show decalcification of the involved petrous apex) CT Scan is helpful in ruling out petrous apex syndrome caused by Meningioma or neuroma of Trigeminal nerve which may show a similar picture along with associated features and evidence of intracranial space occupying lesion in the skiagram and carotid angiograph.

Hence the approach along the route of invasion of petrous apex is the most practical way. Posterior cell tracts can be traced without destroying the existing hearing level. After mastoidectomy, any of the following routes can be adopted.

1. Cell tract between geniculate ganglion and superior semicircular canal. Since it is along the course of the facial nerve, injury can occur.

2. Cell tract about the lateral and behind the superior semicircular canal. It is along the course of the superior petrosal sinus towards the internal auditory meatus and sometimes to the apex.

3. Under the arch of superior semicircular canal as described by Frenckener.

4. Cell tract between the posterior semicircular canal, Jugular bulb and the facial nerve as described by Dearmin and Farrior.

5. By elevating the middle fossa dura from the arcuate eminence (Eagleton). This approach is blind and there is a possibility of dural tear. After doing radical mastoidectomy, the route can be explored.

6. Though the triangle between Tegmen tympani, carotid artery and cochlea as described by Almoor.

7. After removing the tympanic plate of the external canal posterior to the base of the glenoid fossa suture line, carotid artery is lifted forward by a guaze sling and the petrous apex is explored through the posterior wall of the body of the carotid canal. But here, the risk of lacerating carotid artery, injuring the facial nerve, cavernous sinus, superior petrosal sinus dura and the cochlea are more.

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CASE - 7

A CASE OF SUCCESSFUL DECANNULATION IN A CASE OF LARYNGOTRACHEAL STENOSIS

Presenting complaints

22 year male complaints of difficulty in speaking for the past one year

Past History:-

Patient was apparently normal 1 year back then he consumed poison. Tracheostomy was done in Chengelpet Medical College. He was on endotracheal tube for 1½ months.

Investigations:

Blood investigations within Normal limits.
X-ray neck soft tissue - narrowing of air shadow in sub-glottis.

Examination Findings

Video laryngoscopy - Both vocal cords mobile

Retrograde laryngoscopy

Stenotic segment present posteriorly at subglottic level.

Procedure

1. Under GA, endotracheal tube for anaesthesia was given though the tracheostomy.

2. A transverse incision made at level of tracheostome extending from one side to the another.

3. Superior & inferior skin flaps were raised.

4. The strap muscles were dissected

5. Trachea made free from all its attachments.

6. Two tapes were introduced in between oesophagus & trachea.

7. Dissection was close to tracheal wall in order preserve the recurrent laryngeal nerve.

8. The stenotic segment in palpated & resected.

9. Wedge resection of cricoid cartilage at its anterior wall was made.

10. Using 3-0 prolene end to end anastomosis was done.

11. Wound was closed in layers.

Discussion

Observed causes of stenosis

1. Prolonged intubation
2. Bigger sized ET tubes
3. High pressure cuffs
4. Increased in rubber than silicone tubes
5. Inadequate deflation of cuff

Various techniques available for sub-glottic stenosis are

1. Laryngofissure, thyrotomy
2. Anterior cricoid split
3. Combined laryngofissure with post-cricoid fixation
4. Laryngotracheoplasty
5. Laryngeal reconstruction by augmentation

6. Resection of cricoid with thyrotracheal anastomosis
7. Resection & end to end anastomosis
8. Grillo's procedure
9. Laryngeal widening operation
10. Laryngeal transplant

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CASE - 8

AN INTERESTING CASE OF ARY-EPIGLOTTIC FOLD PAPILLOMA WITH LEFT VOCAL CORD PARALYSIS AND LARYNGEAL WEB

Presenting complaints:-

30 year male with complaints of noisy breathing since 6 months.-

H/o of presenting complaints:-

H/o difficulty in breathing and change of voice since childhood.

hoarse voice.

Complains of noisy breathing which is aggravated by lying down and severe in nature for the past 6 months.

Not relieved by medications.

No history of trauma or previous surgeries

No H/o hemoptysis, difficulty in swallowing, evening rise in temperature.
Blood investigations : - Within Normal limits.

Family history: No history of similar complaints in the family.

Local examination

Patient was in stridor
Accessory muscles of respirations were acting.

IDL:-

Smooth flappy mass with broad based attachment on left aryepiglottic fold and arytenoid, Left cord not seen
Right vocal word post 1/3 seen and mobile.
both pyriform recess free.
Laryngeal web seen in the anterior commissure

Investigations:-

Plain X-ray AP / Lateral - No prevertabral soft tissue widening.
X-ray chest - within N limits

Video - laryngoscopy:-

Left ary - epiglottic fold prolapsing in and out of glottis during respiration. Rt cord was normal. Left cord immobile.

Surgical procedure:-

Tracheostomy and microlaryngeal surgery done under endotracheal anaethesia.

Kleinsasser suspension laryngoscope applied. Laryngeal web excised.

Floppy mucosal fold on left side excised and sent for HPE.

Ryle's tube was inserted through oral cavity and taken through tracheostome and stabilised.

Post - operative period:-

- Ryle's tube was removed.
- Spigotting was done 13 days post operatively.
- Speech therapy given.

HPE post - operative - papilloma of A.E fold.

Discussion:-

Anatomy of vocal cords is very important in understanding the pathology of vocal cord lesions. Medially to laterally, the membranous vocal fold is made up of squamous epithelium, Reinke's potential space (superficial layer of lamina propria), the vocal ligament (elastin and collagen fibres) and thyroarytenoid muscles.

Adult - onset papillomas are occasionally solitary or at least more localized than juvenile onset ones, behaviour also may be less aggressive. However, adult onset papillomatosis can behave like the more aggressive juvenile form.

The carbon-di-oxide laser remains the most widely accepted management for papillomas in the larynx. The laser is favoured because of its haemostatic properties. In addition, the precision of the laser allows for vaporization of the lesion by planes avoid harming underlying vocal cord. Combined presentation of vocal cord paralysis, laryngeal web & papilloma is rare.

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CASE - 9

A RARE CASE OF AMIANTHOID MYOFIBROBLASTTOMA OF NOSE

Presenting Complaints:-

8 year old female child
C/o Swelling over the nose - 3 months
Swelling insidious in onset
Progressive to attain present state

Past History:

No H/o previous ENT Surgeries
No H/o T.B / D.M/ Hypertension

General Examination

NAD

Local Examination

Swelling 3 x 3 cm size swelling
present over dorsum of the nose
firm to hard in consistency.

Non - tender
Skin over the swelling pinchable
Transillumination test - negative.

Anterior nasal examination
Vestibule normal
Swelling seen in the roof of right nasal cavity
Left nasal cavity normal
Septum in midline airway adequate.

Investigations

Blood - within N limits
CT Scan PNS - swelling in Rt nasal cavity.

FNAC - aspirates are cellular & composed of sheath of spindle cells and mixed with inflammatory cells. Cells are clumped and have fusiform nuclei

Impression - neurofibroma ? benign spindle cell neoplasm.

Procedure:

Under General Anaesthesia patient in supine position excision of mass done incision made over the mass by blunt dissection. Mass dissected in toto and sent for HPE.

Histopathology report:-

Microscopic sections show a neoplasm arranged in diffuse fashion containing vascular channels of varying calibre surrounded by round to spindle cells with dense nuclei and periphery of neoplasm showing collagen bundles and muscle fibres.

Impression - Myofibroblastoma

Discussion:-

- An uncommon benign mesenchymal tumour.
- Age: Wide range, male preponderance
- Most commonly found as solitary nodules in head and neck

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CASE 10

FUNCTIONAL TOTAL PAROTIDECTOMY IN A CASE OF PLEOMORPHIC ADENOMA

Presenting Complaints :

40 years female
C/o. swelling in front of left ear - 2 months.

History of Presenting Illness :

Patient was apparently normal 2 months before then she developed a swelling in front of the left ear which was initially small in size and gradually increased and attained the present size.

No H/o pain over the swelling
No H/o fever
No H/o trauma, ear discharge, ear pain
No H/o difficulty in opening the mouth.

Local Examination :

Swelling 4 x 3 cm
shape oval. Skin over the swelling (N).
surface smooth. Margins well defined.
no visible pulsation

Palpation :

Not warm, not tender
hard in consistency, mobile
skin over the swelling pinchable becomes prominent on contraction of masseter

Oral cavity - gingivitis (+)
Stenson's duct opening (N)

Nose - Post nasal - NAD
examination

Ear - TM intact both ears
Facial nerve function (N)

Diagnosis: Left parotid swelling

Investigations : blood - within (N) limits

FNAC : Pleomorphic adenoma

Smears shows sheets and clumps of benign salivary gland ductal epithelial cells with bare nuclei, plasmacytoid like cells in a myxoid background.

CT Scan-shows homogenous density in the region of left parotid. No evidence of bony erosion.

Left Total Parotidectomy assisted by operating microscope to preserve facial nerve.

Patient in supine, a left cervicomastofacial incision was made. Skin and subcutaneous tissue dissected. Tumour mass with central necrotic change found entangling the lower zygomatic and buccal branches of the facial nerve. Superficial lobe of the parotid with tumour removed. Tumour was entangling the deep lobe and the buccal and zygomatic branches of facial nerve. Deep lobe was also removed wound closed in layers drain kept.

Post - operative period - mild left facial weakness.
Improved with physiotherapy
Patient comfortable after procedure.

Discussion

Pleomorphic adenoma is the commonest benign tumour of the salivary gland. It forms 2.7% in head and neck tumours.

Males and females are equally affected. Parotid is the commonest salivary gland were it occurs.

Malignant transformation of pleomorphic adenoma is rare. It is indicated by sudden increase in size, facial weakness and pain. Facial nerve injury is common in parotidectomy. Operating microscope helps in better delineation of facial nerve and its branch so that injury of the same can be avoided.

M:F ratio is 1:1

Average age at presentation - 40 years.

It is also called ` Mixed cell tumour. It arises from intercalated duct cells and myoepithelial cells. It forms 90% of benign parotid tumours; 50% of all sub-mandibular gland tumours.

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CASE - 11

A CASE OF EXCISION OF BRANCHIAL CYST BY CONTRACT DELINEATION TECHNIQUE

Presenting complaints:-

40 years male presented with
C/o Swelling in right side of neck - 6 months,
insidious in onset
Progressive
No H/o pain

Past History:

No H/o previous ENT Surgeries
No H/o T.B/ D.M/ Hypertension.

Clinical findings

Swelling 3 x 3cm in (Rt) side of neck in lower half.
Not warm
Non - tender
freely mobile
Skin over swelling pinchable. Soft fluctuant
Not translucent
ENT Clinically - Normal

Diagnosis Branchial cyst Right side

Investigations:-

Blood within normal limits

Ultrasound neck - Cystic swelling 3 x 3 cm
CT Scan - cystic swelling in Rt side of neck 3 x 3 cm. Larynx and

vertebrae Normal.

Surgery:-

- Methylene blue injected into the cyst.
- Tense cyst was decompressed by aspiration.
- Deeper dissection was done
- Cyst removed in toto.

Post - operative period:-

Uneventful patient comfortable

Discussion

There are 4 types of anomalies that may arise from the branchial apparatus.

- Cysts
- Complete sinus
- External fistula
- Internal fistula.

Branchial cyst is common the junction of upper one-third and lower two-thirds of sternocleidomastoid muscle. The complication of branchial cyst is infection and fistula formation.

Fistula formation occurs due to the persistent patency of the branchial grooves or pouches with thesinuses being produced when the interlacing tissues break down. Fistulae are less common than cysts, they are seen in all age groups but generally seen in younger subjects along the lower part of the anterior border of the sternomastoid muscle. They sometimes occur along the posterior border of the sternomastoid muscle. Congenital fistulae are called Primary fistulae. Secondary fistulae result from drainage of a cyst.

The contrast delineation techniques allows removal of cyst without rupture and also ensures complete removal.

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CASE - 12

A INTERESTING CASE OF INVASIVE MUCORMYCOSIS RESPONSIVE TO TREATMENT

Presenting Complaints:-

43 year old male
C/o. pain and swelling over left side of face - 15 days.
headache - left temporal region - 15 days.

History of presenting complaints:-

Patient was apparently normal 15 days back. Then he developed pain and swelling over left side of face, insidious in onset
gradually progressing

Patient known diabetic under oral hypoglycaemics.

He was recently diagnosed as diabetic

Initially he had a pain in left upper molar teeth followed by swelling in lelf side of face gradually increasing.

H/o loss of sensation in left half of face.

H/o watering from eyes and double vision - 3 days.

known hypertensive on regular treatment.

Investigations:-

TC - 13,000 DC - P 80/- L18% E2%, ESR 15/32 HB - 10.8gm% FBS - 78mg% PPBS - 139mg%
Liver function test - Normal
Renal function test - Normal

VDRL, ELISA - negative
CXR & ECG - within Normal limits.

ENT Nose - Mucopurulent discharge with blackish material left middle meatus.

Throat and ear - NAD

Oedema left side face with sinus in the infraorbital area.

Diagnostic Nasal Endoscopy

Lt blackish fungal material over anterior end of inferior turbinate and middle meatus.

Muco - Purulent discharge in middle meatus.

Rt - Paradoxically curved middle turbinate.

CT Scan PNS - Soft tissue density involving Lt maxillary, frontal and ethmoidal sinus with medial wall erosion.

Procedure :- FESS Under G.A

Left side uncinectomy, middle meatal antrostomy
anterior and posterior ethmoidectomy done.

Endoscopic debridement done under G.A.

HPE report - Invasive Mucormycosis

Follow up:-

Medical opinion obtained. Patient was treated with amphotericin as advised by general physician.

Patient treated with intravenous amphotericin dose 1 mg/kg body weight infused in normal saline (slow infusion), intravenous cefotaxime and metronidazole. Patient improved well after treatment and was discharged.

Discussion

In recent time Fungal granuloma of the Sinuses has become a common occurence. Aspergillus fungus is the most commonly encountered Fungus in man's environment. Most potentially pathogenic Fungi are Ubiquitous soil Saprophytes or even normal human commensals. They are capable of causing isolated limited disease if local defence mechanism are compromised such as obstruction of sinus ostium or impaction of Foreign body. In general invasive disease is usual only in the presence of immune defeciency.

Inhalation of spores of Aspergillus species from the soil cause disease in human's. Histologically Aspergillus organism appear as septate Hyphae of uniform diameter with 45 degree angle branching. It is the most common diagnosis in case of Fungal sinusitis.

It may present in four different forms.

1. **Isolated non-invasive type** in the form of a solitary Fungus ball (Aspergilloma). Presumbaly obstruction of the sinus from Mechanical or inflammatory causes leads to a low O_2 environment favourable for Fungal growth. This is endemic in Sudan. This can be cured by suitable surgical drinage procedure.

2. **Slowly invasive fungal disease**: This should be suspected in all chronic sinusitis that do not respond to prolonged medical or surgical treatment. Diagnosis is based on biopsies which will demonstrate tissue invasion by fungal hyphae with a granulomatous and fibrous tissue response.

3. **Fulminant invasive aspergillosis**: Seen in immunocompromised patients common in lung cancer and transplant centers. Pathology-has a tendency to invade vascular walls leading to thrombosis and ischaemic tissue necrosis. Rapidly disseminates locally to the orbit and brain and systemically to lungs, liver and spleen.

4. **Allergic aspergillus sinusitis (non invasive)**: Analogous to allergic broncho-pulmonary Aspergillosis (ABPA) common in younger age group presentation is with nasal polyps and history of asthma. The underlying pathology appears to be a local immunological reactivity of Aspergillus antigens.

Treatment for most of these cases is removal of disease and surgical drainage Medical treatment is with Amphotericin-B, 5-Flucytosine, Ketacanozole & Fluconazole.

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CASE - 13

A CASE OF SOFT TISSUE SARCOMA OF PALATE

Presenting complaints:-

18 years female
C/o. Throat pain - 2 years
headache - 6 months
swelling in palate - 1 month

History of presenting complaints:-

C/o. Throat pain on and off 2 years
insidious
progressive
intermittent

C/o. Swelling in mouth - 1 month
insidious in onset progressive

Past History:-

No H/o T.B / D.M/ hypertension

General Examination - NAD

Local Examination

3 x 2cm smooth surface well circumscribed swelling seen in left side of hard palate extending from anterior pillar to midline and to pre-molars.

On palpation non tender firm.
Nose - smooth bulge seen in floor of left nasal cavity
ear and neck - NAD

Diagnosis - ? Adenoma palate

Investigations:-

Diagnostic nasal endoscopy - smooth swelling seen in floor of the nose
Fine needle aspiration cytology - pleomorphic adenoma.

Smears shows sheets and clumps of benign salivary gland ductal epithelial cells with bare nuclei, plasmacytoid like cells in a myxoid background.

CT scan PNS - opacity seen in left hard palate with erosion

Routine blood investigations - Normal

Orthopantogram - Soft tissue shadow seen in left side of palate.

Surgical Procedure:-

Boyle - Davis mouth gag applied. Incision made over the swelling, by dissection the tumour was excised in toto and sent for HPE.

Biopsy report:-

Low grade fibromyxoid sarcoma

Follow up:-

Patient had an uneventful recovery and was referred for post operative radiotherapy.

Discussion:-

Sarcomas are much less common than carcinomas and unlike carcinoma, they occur in all ages. Whereas the cells in a carcinoma tend to be arranged in discrete clumps surrounded by a variable stroma, those in a sarcoma are disposed in diffuse sheets, in which the neoplastic cells merge inseparably into the stroma.

On the whole, sarcomas spread more rapidly than carcinomas the prognosis is correspondingly more grave - early blood - borne metastases are typical and the lungs are often riddled with secondary deposits.

Radical resection affords the best hope of cure, for these tumours are very radioresistant.

Fibromyxoid sarcoma is an uncommon sarcoma. The histopathological features are greater cellular pleomorphism, nuclear hyperchromatism and mitotic activity, gaint cells are quite common. Collagen formation is scanty.

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CASE - 14

A CASE OF SCHWANNOMA OF TONGUE BASE

Presenting complaints:

30 year old female C/o. change of voice - 1 month

Patient was apparently normal 1 month before then she developed change of voice - insidious in onset and progressive.

Past History: No H/o T.B/ Diabetes mellitus / hypertension.

General Examination - Voice - characteristic hot - potato type of voice.

Local Examination

Throat - Swelling seen in posterior one third tongue. Smooth surface. On palpation it is firm.

Both ears - Tympanic membrane normal.

Nose - Deviated nasal septum to left (asymptomatic)

Indirect laryngoscopy - both cords mobile.

Diagnosis - ? Lingual thyroid

Investigations:-

Blood within Normal limits
thyroid function tests - Normal
thyroid scanning - Normal uptake
no evidence of uptake from the tumour.

Procedure:-

Suprahyoid collar incision made dissection continued using diathermy knife suprahyoid muscles identified and cut. The tumour was identified and removed in toto using blunt dissection. It was attached to tongue base.

Post operative period - uneventful

Biopsy report - Consistent with schwannoma

Discussion

Schwannoma is usually solitary and may arise from any cranial or peripheral nerve. It is encapsulated and appears to arise focally or a nerve trunk, so that the nerve itself is stretched. A common site of schwannoma is the auditory nerve and they may be bilateral. The tumour may occur on spinal nerve roots and in deed on any large nerve trunk. A mediastinal or retroperitoneal location is not uncommon. Microscopically the tumous is composed on elongated cells in disposed in one or two pattern described by Antoni.

In Antoni type `A' cells are arranged in an organised compact manner. The fascicles of cells may interweave to form a pattern similar that seen in leiomyoma.

In Antoni type B the tissue is loosely textured and the cells are scattered in an oedematous matrix. both patterns can be found in same tumour Malignant change in schwannoma is rare. In this case Schwannoma was in rare location (base of tongue).

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CASE - 15

AN INTERESTING CASE OF NECK SWELLING

Presenting complaints

39 years old female

C/o. swelling in left side of neck - 6 years
H/o. pain in the neck - 1 year

History of Presenting complaints

Patient was apparently normal 6 years back then she developed.

Swelling in left side of neck - 6 years.

Insidious in onset

Progressive to attain present state.

No H/o. fever

No H/o. increase in size during deglutition

H/o. pain in left side of neck - 1 year.

- Pricking in nature
- Increased by taking food
- Decreased by medications

No H/o. change of voice

No H/o. difficulty in swallowing

Past history

No History of diabetes mellitus / hypertension / tuberculosis.

Personal history

Non - vegetarian diet, non-smoker, non-alcoholic.

General examination : NAD

Local Examination :

Swelling 3 x 3 cm in left submandibular region.
Soft, cystic in consistency
Mobile
Not warm / tender
Does not move on deglutition
Ear / Nose - NAD.
Oral cavity - Wharton's duct was not prominent. No pus coming from Wharton's duct.

Diagnosis : neck swelling ? hemangioma ? Lipoma

Investigations : Blood - within normal limits.
FNAC - inflammatory cells in eosinophilic background.
Xray neck for submandibular gland (Orthopentanogram) - Radio - opaque stone in left submandibular region.

Removal of Stone under GA.

Under GA, left submandibular duct identified and opened. Cannula inserted. Mucosa around the duct was explored. Calculi were found in proximal part of the duct. The left submandibular duct marsupialized part was sutured with 3 - 0 catgut. Haemostasis achieved. Patient recovered from general anaesthesia.

Post-operative period:- Patient improved well after two weeks swelling decreased.

Discussion

Calculi are most common in the submandibular salivary gland. The reasons being that position of salivary duct is against gravity and the secretions are rich in calcium. The complication of submandibular stone are submandibular abscess and salivary fistula.

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CASE - 16

A CASE OF RECURRENT BRAIN ABSCESS

Presenting complaints:-

30 year old male complaints discharge from Lt ear - 1 year
C/o headache and vomiting - 1 month

Past History:-

45 days back he underwent burn hole aspiration and brain abscess was aspirated. He was advised to attend ENT OP. Patient was not compliant.

No H/o. T.B, diabetes mellitus, hypertension.

General Examination:-

Patient oriented drowsy

Local Examination

Lt ear - foul smelling discharge present
Polyp seen in External auditory canal
T.M could not be visualised
Post - aural region - NAD
Rt ear, Nose, throat - NAD
CNS examination - Cranial nerves Normal
motor system, - Normal

Investigations:-

haemogram - within Normal limits

Pure tone - Lt ear - moderate conductive loss

Audiogram Rt ear - mild conductive loss

Ear swab culture and sensitivity - No growth

Liver function test - Normal
Renal function test - Normal

Pus for Culture and sensitivity of brain
Abscess aspirated previously - Coagulase + ve Staphylococcus aureus sensitive to amikacin.

Examination on table-Polyp seen in External auditory canal arising from attic region with cholesteatoma flakes.

Investigations:- CT Scan brain with contrast shows abscess in left temporal region.

X-ray mastoids-lateral view shows left side-sclerosed, right side-cellular

CT Scan temporal bone shows left mastoiditis

Treatment:-

Left Modified Radical Mastoidectomy and simultaneous burn hole aspiration done.

Operative findings:-

Polyp seen in attic region
extensive cholesteatoma in attic, aditus and antrum
extending to sinodural angle and to tip cells.

There was breach in tegmen plate and dura exposed.

granulation at breach seen

Left Modified radical mastoidectomy done

High dose parenteral antibiotics (intravenous amikacin & cefotaxime) anti-oedema (intravenous furosemide, decadron and mannitol) and anti-epileptics given.

Post - operative period:-

Patient had uneventful recovery

Discussion

2% of CSOM are complicated by intracranial complication of brain abscess. The great majority of otitic brain abscesses encountered today are the result of chronic suppurative otitis media with cholesteatoma. With the advent of sulphonamides and other antibiotics, acute middle ear infection is effectively controlled.

Pathways of extension to brain

1. Extension with preformed pathways such as (a) dehisence in Tegmen plate (b) form suppurative labyrinthitis through internal auditory meatus.

2. Bony erosion by granulations tissue or cholesteatoma.

3. Extension by venous spread such as thrombophlebitis of draining vessels.

4. Periarteriolar spaces of Virchow Robinson.

5. Normal anatomical pathways such as oval window round window.

Factors that influence the development of complications

It is influenced by variety of the infecting organisms and its virulence. Certain strains of haemolytic streptococcus cause more complications than other strains. The type III pneumococcus has a particular prediliction of intracranial extension. Resistance is lowered in infancy, old age and diabetes. Too small dose of an antibiotic for too brief a time and use of a less effective drug also contributes.

Pathology

The complications of CSOM can be classified as intra-cranial and extra cranial. The intra cranial complications are meningitis, encephalitis, temporal bone abscess, cerebellar abscess and lateral sinus thrombosis.

Pathology of brain abscess:- The clinical features of brain abscess are headache, nausea and vomiting. Rise of temperature may or may not be present. The infected thrombi lead to liquefactive necrosis of brain matter. As the brain abscess expands it causes severe headache, vomiting & loss of consciousness. The end stage of brain abscess is rupture and cerebellar hermation and death.

Discussion on Brain abscess

Otogenic brain abscesses almost always develop in the temporal lobe or cerebellum. In children 25% of all brain abscesses are otogenic, while in the adult, with a greater predominance of chronic ear disease, the proportion of brain abscesses caused by ear infection is greater than 50% of the various routes of spread previously described, the commonest responsible for brain abscess is by direct extension of infection through an osteitic tegmen tympani with formation of a middle fossa extradural abscess. Formation of an abscess starts with an area of cerebral oedema and encephalitis. Rarely, this oedema is poorly contained and proceeds to massive cerebral oedema with spreading encephalitis.

Clinical features of brain abscess

The earliest stage of `encephalitis' when brain tissue is invaded causes headache, fever, malaise and vomiting followed by drowsiness. The symptoms may be slight but drowsiness should always provoke suspicion.

In phase of encephalitis if progression continues drowsiness may progress to stupor and then coma and death from tentorial herniation.

Special investigation

1. Computerised tomography (CT): is the most important investigation for diagnosis of brain abscess. The position and size of an abscess can be shown clearly.

2. Carotid angiography: is used only when CAT is not possible deformity of the shadow of internal carotid tree may provide evidence of soft tissue mass in the temporal lobe.

3. Electroencephalography: was an useful investigation before CAT Abnormal delta wave activity allows accurate localization in 50%

4. Brain puncture (Burrhole-needling): diagnosis of brain abscess is ultimately established finding of pus on needling through a burrhole.

Treatment

The most successful treatment is aspiration of pus. Total excision of the abscess cavity also can be done. After this, the predisposing infection of the middle ear must be dealt by modified radical mastoidectomy.

Prognosis

The advent of antibiotics and advantages of early neurosurgical care have not yet resulted in reduction of mortality from 50% though the incidence has greatly deceased. In our case, with all intracranial complication, the patient was successfully managed. This is an interesting case of recurrent brain abscess

because patient failed to eliminate otogenic focus of infection.

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CASE - 17

A CASE OF POST-FESS EPISTAXIS

Presenting complaints:-

25 year old female presented to the OP with complaints of bleeding from both nostrils with nasal pack.

History of presenting complaints:-

Patient underwent fess in an institution elsewhere and developed uncontrollable post operative epistaxis. Patient was referred to our institute for management.

Past History:-

Known case of bilateral ethmoidal, sphenoidal and maxillary sinusitis

No H/o. previous surgeries, hypertension, diabetes, bronchial Asthma or bleeding diasthesis.

H/o. of blood transfusion of one unit of blood.

General Examination

Patient conscious, oriented, afebrile.
BP 130/80
PR 78/min
CVS-S1, S2 (+) Normal
RS-Clear

Local examination

Nose - pack in situ. On removal of pack oozing of blood.
Posterior nasal bleeding present.

Ear and throat - Normal

Diagnosis - Post-FESS epistaxis

Investigations:-

TC - 15,000
DC - P 84%, L 15%, E 1%
ESR - 4/19
Hb - 9.5 gm
BT - 2"
CT 5 ½"
Platelets - 1.2 lakhs /mm^3
Urea - 33 mg %
Sugar - 136 mg %
Creatinine - 1 mg %
X-ray Chest - Normal
ECG - Normal
Blood group - B+

Haematologist opinion: Post operative bleeding secondary to bleeding disorder (? ITP). Patients was reinvestigated by haematology.

Medical opinion

Diagnosis post operative epistaxis (reactionary haemorrhage).

Diagnostic nasal endoscopy

Under local anaesthesia nasal pack removed. Nasal cavity was examined. Mild mucosal bleeding present in both the nasal cavity. Right nasal cavity diffuse ulceration present in lateral wall and septum. No major bleeding point seen. Ivalon nasal pack of size 8cm with strings placed in the nasal cavity.

Course in the hospital

15/7/05	Had menstual bleeding
19/7/05	Repeat blood Investigations Hb - 10.3 gm % WBC - 12,300 (Toxic changes) DC - P66%, E6%, B1%, L24% **Platelet count 5000 Cells / mm^3** PT Control 12 Sec. Patient 12 Sec. INR 1.0 APTT Control 32 Sec. Patient 28 Sec.
20/7/05	4 units of B platelet transfused
21/7/05	H/o. of dark coloured stool, H/o. of prolonged menstrual bleeding. H/o. of bleeding at injection site, bleeding in urine (Haematuria) **Platelet count 5000 / mm^3** Vitals - stable
23/7/05	Platelet transfusion given. Hematuria decreased
25/7/05	Nasal pack was removed. No bleeding.

Blood investigation

TC - 9600
DC - P68%, L30%, E2%
Hb - 10.9 gm%, PCV - 33%

Platelet 25,000

27/7/05 Bone marrow aspiration done - increased megakaryocytes. **Diagnosis - idiopathic thrombocytopenic purpura.** Patinet was treated with intravenous steroids.

Platelet count increased. She had no bleeding and was discharged.

Discussion

Idiopathic thrombocytopenic purpura:- The main features of the bleeding tendency that is associated with thrombocytopenia are superficial hemorrhage and hemorrhage into mucous membrances. Purpura is characteristic and there are often multiple, small, superficial ecchymoses, but deeper hematomas are unusual. Mucosal bleeding from the gingivae and nose (epistaxis) is common, as are also hematuria, menorrhagia and bleeding from the gastrointestinal tract. A serious hazard is intracranial hemorrhage which is fortunately rare.

Idiopathic thrombocytopenic purpura is associated with.

i. Prolonged bleeding time

ii. Positive capillary fragility test

iii. Poor clot retraction.

I.T.P is acute, self-limiting disease. It shows female preponderance.

The blood picture is normal except for thrombocytopenia. There is auto antibody IgG which acts against platelets and causes them to be sequestered in the spleen and destroyed. Splenectomy is of value is this condition.

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CASE - 18

A CASE OF DIFFICULT TRACHEO-OESOPHAGEAL PUNCTURE

Presentation

67 year old gentleman
C/o.difficulty in swallowing & speaking

History of presenting complaints:-

C/o.difficulty in swallowing for both for solids and liquids.

Progressive

No vomiting/nasal regurgitation

Past History:-

Patient underwent successful total laryngectomy for stage III Ca. Larynx 2 years back and lost in follow up. Depression due to loss of job and inability to speak

General Examination

General condition - fair
Neck : well healed tracheal stoma
Otherwise normal
Throat - IDL - pharyngeal inlet shows pooling of saliva
Nose/ear - normal
Systemic examination - within normal limits

Investigations:-

Complete haemogram - within normal limits.
ECG, X-ray neck-AP view - within normal limits.
Barium swallow-Narrowing of Crico-oesophageal sphincter with proximal pooling. No evidence of diverticulum.

Procedure done

Oesophagoscopy under GA:
Failed because of severe narrowing of Crico-oesophageal sphincter

TEP procedure could not be done as Crico-oesophageal segment was stenosed

Patient underwent repeated dilation from 8 FG to 14 FG

Repeat oesophagoscopy was done

Adult oesophagoscope would not be passed

Paediatric oesophagoscope could be passed and successfully achieved swallowing.

Patient was fitted with a duck-bill prosthesis & regained good voice after speech therapy.

Discussion

Incidence of failed TEP range from 11 to 70%. Narrowed upper oesophageal sphincter, infection poor general condition of the patient, poor mental drive for TEP, alcoholism & smoking are some etiological factors for failed TEP.

The factors which affect speech are delayed swallow reflex, diminished pharyngeal motor response, delayed relaxation & weakness of the upper oesophageal sphincter, interruption of oral/glossal structures, Oesophagitis and

oesophageal strictures, dysmotility and diverticulums.

Pre-requistes for TEP

1. Oesophageal insufflation (>AUB) test should be successful.

2. No significant hypopharyngeal stenosis.

3. Adequate pulmonary reserve

4. Good cough reflex should be present.

5. Check for hypothyroidism/DM/Malnutrition.

6. Patient motivation/family support/financial position.

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2. Maran A.G.D. Stell and Maran's head and neck surgery.

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CASE - 19

A CASE OF PERITONSILLITIS WITH TUBERCULAR ADENITIS

Presenting complaints : 25 year old male

C/o. throat discomfort - 8 months
C/o. difficulty in swallowing - 8 days

H/o presenting complaints :

Patient was apparently normal 8 months back, then, he developed, discomfort in the throat - 8 months

- insidious in onset
- exacerbated by Infection (URI)
  controlled by medications

Developed acute pain 10 days ago.

C/o. difficult in swallowing - 8 days.

- progressive more for solids than liquids

Past History :

No H/o. T.B / Diabetes mellitus / hypertension / bronchial asthma.

Personal history :

Not a known smoker / alcoholic

General Examination : NAD

Local examination :

Both Tonsils congested. Right tonsils enlarged and peritonsillar swelling present.
Trismus (+)
Both Jugular - digastric nodes enlarged and tender
Ear and nose normal

Diagnosis: Peritonsillitis (Rt)

Investigations :

Blood investigations

TC - 7100 cells / mm^3
DC - P70% L25% E5%
ESR - 10/22 mm
Hb - 11.0 gm%

X-ray chest PA view - Normal

Diagnostic nasal endoscopy	adenoids (+) right side - septal spur +
Peripheral smear	Normal smear
Ultrasound abdomen	Normal study

FNAC right upper deep cervical node - smear shows plenty and lymphocytes, histiocyte, epithelioid cell collection in a necrotic background

Impression - Tuberculous lymphadenitis

Patient started on Anti-tuberculous therapy after obtaining T.B. clinic opinion.

Discussion

Tuberculosis of Tonsils is a very rare presentation. It can be managed medically by anti-tuberculous therapy. Tonsillectomy is usually not necessary. Tuberculosis of lymph nodes leads to matting of lymph nodes. The complication of tuberculous lymphadenitis is abscess formation. The abscess is called collar-stud abscess. Management of tuberculosis lymphadenitis is excision of involved lymph nodes and anti-tuberculous therapy.

Anti-tuberculosis therapy consists of intensive phase and maintenance phase. In intensive phase 4 drugs are given namely INH, Rifampicin, Pyrazinamide and ethambutol. In maintenance phase 2 drugs are given namely INH and Rifampicin.

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CASE 20

A CASE OF OESOPHAGEAL CARCINOMA IN A CHILD

Presenting Complaints

12 year old female
C/o. difficulty in swallowing - 10 to 15 days

H/o. Presenting complaints

Patient was apparently normal 15 days back
No H/o. difficulty in swallowing in the past
No H/o. prior lye or corrosive ingestion
No H/o. aspiration, other G1 symptoms
No H/o. radiation exposure

General Examination

Anaemic
Poor weight - 18 Kgs
No other significant findings

ENT Examination

Pooling of saliva in both pyriformfossa
Laryngeal crepitus present
No neck nodes
Diagnosis Dysphagia for evaluation? Fungal infection? Malignant growth

Investigation

Hb - 9.0 gm%
Peripheral smear - Normal
Ultrasound abdomen - Normal

X-ray chest-PA view - Noraml
X-ray soft tissue neck lateral view - Normal
Barium swallow shows filling defect in upper oesophagus.

Procedure

Oesophagoscopy done under general anaesthesia.

- greyish white chessy material at the level of upper oesophagus
- on sucking out of material brisk bleeding encountered
- biopsy taken
- Ryle's tube insertion attempted but failed.

Gastroenterologist opinion

Patient advised fibro-optic oesophagoscopy.

Fibro-optic oesophagoscopy under local anaesthesia

big yellowish mass 1" by 2" (?impacted food bolus) in upper part of oesophagus. Stricture was located beyond it, scope could not be passed.

Fibro-optic bronchoscopy

- Extrinsic compression of trachea from posterior just above the carina
- Tracheal lumen compressed to narrowest horizontal slit
- Scope negotiated through it. Distal airway found normal

CT scan neck & chest

patient could not tolerate the procedure
developed breathlessness aggravated on lying supine

Procedure-Repeat oesophagoscopy under General anaesthesia

Patient intubated
Rigid oesophagoscopy under G.A. done
White chessy material removed.

Feeding jejunostomy done.
Patient comfortable after procedure.

Biopsy report - infiltrating squamous cell carcinoma

Post-operative period - Uneventful. Patient referred for Radiotherapy.

Discussion

Oesophageal carcinoma is common in men in 6th to 7th decade
1-2% of all cancers.

It constitutes 5-7% of all G1 malignancies. Incidence varies within and between the countries.

Carcinoma oesophagus in the young

1958-1st case of oesophageal carcinoma in 14 years old boy. Moore C visceral squamous cancer in children. Paediatrics 1958; 21: 573.

1968-15 year old Korean boy Lye ingestion at 3 years age:
Kinnman J, shin HI, Wetteland P.Carcinoma of the oesophagus after lye corrosion. Acta chri scand 1968; 134: 489-93.

In India

1980-Youngest patient-8 year old girl mid third of oesophagus with pulmonary metastasis Soni NK, Chatterji P Carcinoma of the Oesophagus in an eight-year old child.

J Laryngol Otol 1980; 94 327-9.

1989-Shahi et al. 14 year old boy Shahi UP, Sudarsan S, Dattagupta S, et al. Carcinoma oesophagus in a 14 year old child; report of a case and review of literature.

Trob gastroenterology 1989; 10: 225-8

2000-15 year old Sudanese female medina. Saudiarabia Facili-mid third

oesophagus approached by posterior lateral thoracotomy.

Sites of distant metastasis in oesophageal carcinoma

Lymph nodes 72.3%
Liver - 31.8%
Lung - 25%
Peritoneum - 12%, bone 9%

TNM classification for Oesophageal cancer

Primary tumour (7)

T_x - Primary tumour cannot be assessed

T_o - No evidence of primary tumour
T_{is} - Carcinoma in situ

T_1 - Tumour invades lamina propria or submucosa

T_2 - Tumour invades muscularis propria

T_3 - Tumour invades adventitia

T_4 - Tumour invades surrounding structures

Regional lymph nodes (N)

N_x - Regional lymph nodes cannot be assessed

N_o - No regional lymph node metastasis

N_1 - Regional lymph node metastasis

Distant Metastasis (M)

M_x - Distant metastases cannot be assessed

M_o - No distant metastases

M_1 - Distant metastases

Tumour of the lower thoracic oesophagus

M1a - Metastasis in celiac lymphnodes
M1b - Other distant metastases

Tumour of the mid thoracic oesophagus

M1a - Not applicable
M1b - Non regional lymph nodes and / or other distant metastases

Tumours of upper thoracic oesophagus

M1a - Metastases in cervical nodes
M1b - Other distant metastases

Investigations in carcinoma oesophagus

Chest Xray
Barium oesophagography
Oesophagoscopy
Bronchoscopy
CT
MRI
Scintigraphic TESTS
Including
CT 99 bone Scan-may be the only site of metastasis

Advances

Endoscopic ultrasound
Minimally invasive surgical staging
Laproscopy with or without ultrasonogram

Treatment

Surgical resection
Radiotherapy
Chemotherapy
Combined modalities

Surgical procedures

Distil oesophagus - Left lateral thoracotomy & upper midline incision for abdomen.
Middle and Upper oesophagus - Antero - lateral thoracotomy.

Prognosis

It is usually poor 5 year survival rate is 5-10% only.

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