"ORAL QUESTIONS IN CLINICAL SURGERY"

Q. What is your diagnosis?
A. Subcutaneous lipoma.

Q. Why this is a lipoma?
A. Because it is a very slowly growing swelling which is soft, pseudofluctuant with a slippery edge.

Q. Why the edge of the lipoma is slippery?
A. Because it is present within a very loose capsule so that pressure on one edge moves the swelling within the capsule.

Q. Why the lipoma is pseudofluctuant?
A. Because the fat globules constituting the lipoma are very soft in consistency.

Q. How do you elicit fluctuation in a very small swelling?
A. By Paget's test; the swelling is fixed by the index and thumb of the left hand and pressure is applied on the center of the swelling by the index of the right hand. If there is yielding in the center of the swelling, it is considered fluctuant.

Q. Why this is a subcutaneous and not a subfascial lipoma?
A. Because it is attached to the skin at multiple sites while in subfascial lipoma the skin is not attached to the swelling at all. Also, making the fascia tense does not make the swelling smaller.

Q. How did you detect the skin attachment?
A. There are two methods to detect skin attachment; either by pinching or by gliding.

Q. Mention the different sites of lipoma?
A. 1. Subcutaneous lipoma
2. Subfascial lipoma,
3. Intermuscular lipoma
4. Intramuscular lipoma
5. Subperiosteal,
6. Subserous lipoma,
7. Extradural lipoma
8. Retroperitoneal lipoma
9. Subsynovial
10. Intraglandular

Q. Which site is famous for being precancerous?
A. Retroperitoneal lipoma.

Q. What are the multiple skin swellings?
A. 1. Multiple Lipomata
2. Multiple Sebaceous Cysts
3. Multiple Naevi
4. Multiple Haemangiomata
5. Multiple Lymphangiomata
6. Multiple Neurofibromata
7. Multiple Papillomata
8. Multiple Warts
9. Multiple Keloids
10. Multiple Boils
11. Multiple Skin Metastases

Q. What is the commonest multiple skin swelling?
A. Multiple naevi.

Q. How do you treat this patient?
A. The treatment of lipoma is usually conservative. Excision is indicated if 1) cosmetically annoying the patient, 2) complicated, 3) painful, or 4) causing pressure on a surrounding structure.

Q. What are the complications of a lipoma?
A. Pressure on a surrounding structure e.g. a retroperitoneal lipoma compressing the ureters,
hindering the movement of a nearby joint, calcification, myxomatous degeneration, and very rarely malignant transformation (liposarcoma).

**Q. What is Dercum's disease?**  
A. It is a painful lipoma, also called "adiposa dolorosa".

**Case 2. HAEMANGIOMA**

**Q. What is your diagnosis?**  
A. Cavernous haemangioma of the ......(mention the site).........

**Q. Why this is a haemangioma?**  
A. Because it is a skin swelling dating since birth (may be shortly after), it is pink in color and compressible.

**Q. Why the haemangioma is compressible?**  
A. Haemangioma consists of multiple blood-filled vascular spaces. These spaces communicate with the surrounding veins. Haemangioma is compressible because its contained blood empties into the veins communicating with the haemangioma.

**Q. What are the compressible swellings you know?**  
A. Haemangiomas, lymphangiomas, aneurysms, pharyngeal pouch, saphena varix, varicocoele, pneumatocele, laryngeocele, tracheocele and hernias.

**Q. What is the commonest site of a haemangioma?**  
A. The head and neck region.

**Q. Does it affect internal organs?**  
A. Yes, for example the liver and spleen.
Q. What are the different types of haemangioma you know?
A. The different types of haemangioma are:
1. Capillary Haemangioma:
   Port wine stain, Strawberry angioma, Salmon patch, Spider naevi
2. Venous Haemangioma (Cavernous haemangioma)
3. Arterial Haemangioma (Circoid aneurysm)

Q. What is the commonest complication of a haemangioma?
A. Haemorrhage.

Q. What is the treatment of a cavernous haemangioma?
A. The different lines of treatment are:
   1. Injection of a sclerosant material
   2. Embolization injection
   3. Surgical excision
   4. Laser radiation

Q. As regards injection sclerotherapy, what is the commonest material to be used?
A. Ethanolamine oleate.

Q. What do you mean by embolization injection?
A. That is the injection of some material into the feeding artery of the haemangioma through angiography to produce occlusion of this artery and so necrosis of the haemangioma.

Q. What are the famous materials to be used in this regard?
A. Gelfoam, alcohol foam and silicon particles.

Q. What is a hamartoma?
A. A hamartoma is "a developmental tumour-like
malformation characterized by being formed of the same tissues particular to the part of their origin and these tissues are arranged in a haphazard fashion. It is also characterized by a rate of growth similar to the surrounding structures".

Q. Mention the different types of hamartomas you know?

Q. What are the types of lymphangioma?
A. There are two types:
   1. Capillary lymphangioma (lymphangioma circumscriptum)
   2. Cavernous lymphangioma (cystic hygroma)

Q. What is the commonest site of a cystic hygroma?
A. The neck.

Q. Is lymphangioma compressible or not?
A. Lymphangioma is partially compressible.

Q. A cavernous lymphangioma in the neck has a character that differentiates it from other neck cysts, what is this character?
A. It is the only translucent neck cyst.

Q. When does it become opaque?
A. When it becomes infected.

Q. What are the types of neurofibroma?
A. 1. Solitary neurofibroma
   2. Generalized neurofibromatosis (von Recklinghausen’s disease of nerves)
   3. Molluscum fibrosum
   4. Plexiform neurofibroma (pachydermatocoele)
   5. Elephantiasis neuromatosa
Q. Mention the types of benign pigmented naevi (moles) ?
A. Benign pigmented naevi include the following types :
1. Intradermal naevus
2. Junctional naevus
3. Compound naevus
4. Blue naevus
5. Juvenile naevus
6. Congenital giant naevus
7. Halo naevus
8. Spindle cell naevus
9. Naevus of Ota
10. Naevus of Spilus
11. Lentigo

Q. At what age do benign pigmented naevi start to appear ?
A. They present in childhood and adolescence, rarely they present at birth.

Q. What are the characteristic features of congenital giant naevus ?
A. It is present since birth, may occupy very large areas of the body, usually hairy, and what is more important is that it is precancerous in about 15% of the cases.

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**Oral Questions on a Case of Hernia**

**Case 1. INGUINAL HERNIA**

Q. What is your diagnosis ?
A. Rt. oblique inguinal hernia, uncomplicated,
containing intestine (omentum), no other hernias, no predisposing factors.

Q. Why this is a hernia?
A. Because 1) It is a swelling, 2) At the anatomical site of a hernia, 3) Gives an impulse on cough, and 4) It is (or was) reducible on lying down and by the patient fingers.

Q. Why inguinal and not a femoral hernia?
A. Because 1) the hernia is above the inguinal ligament and not below it, and 2) the neck of the hernia is above and medial to the pubic tubercle and because the hernia descends into the scrotum.

Q. Why oblique and not direct?
A. Because 1) it descends into the scrotum, 2) On doing the internal ring test, there was no swelling to appear on coughing, and 3) the patient is a young male.

Q. Describe how did you do the internal ring test?
A. After reduction of the hernia, the patient is asked to stand while occluding the internal ring (by pressing the finger 1/2 an inch above the midinguinal point), the patient is then asked to cough, observing the appearance of any inguinal swelling.

Q. Why you did not do the external ring test?
A. Because it is painful.

Q. Can a direct hernia descend into the scrotum?
A. A direct hernia can reach the scrotum very rarely.

Q. Where is the defect in oblique inguinal hernia?
A. In the internal ring.

Q. Where is the defect in direct inguinal hernia?
A. The posterior wall of the inguinal canal (Hasselbach's triangle).

Q. What are the boundaries of Hasselbach's triangle?
A. Lateral border of the rectus abdominis muscle medially, the inferior epigastric artery laterally and the inguinal ligament inferiorly.

Q. What are the subdivisions of the Hasselbach's triangle?
A. Hasselbach's triangle is subdivided into medial and lateral parts by means of the medial umbilical ligament.

Q. What are the common contents of a hernia in general?
A. Intestine, omentum and fluid.

Q. Mention the clinical types of oblique inguinal hernias?
A. 1) Bubonocoele, 2) Funicular type and 3) Scrotal (complete) type

1. Bubonocoele = Hernia is only in the groin.
2. Funicular type = Hernia descends into the scrotum but the testis is felt separate from the hernial sac.
3. Scrotal (complete) type = Hernia descends into the scrotum and the hernial sac surrounds the testis which is not felt through the contents of the hernia.

Q. What is hydrocoele of the hernial sac? and what is hernia of hydrocoele?!
A. Hydrocoele of the hernial sac: Part of the sac near its neck becomes encysted by a piece of
omentum and accumulates fluid.
A. Hernia of hydrocoele: In cases of vaginal hydrocoele, a defect occurs in the dartos fascia of the scrotum through which a part of the hydrocoele herniates.

**Q. What are the causes of residual swelling after reducing the hernia?**
A. 1) Sliding hernia, 2) incomplete reducibility due to adhesions between the contents and the sac, 3) hydrocoele of the hernial sac and 4) associated lipoma of the cord

**Q. How would you clinically differentiate between obstructed and strangulated hernias?**
A.

- # This is difficult because both are very acute conditions with the hernia being painful, irreducible & tender.
- # Impulse on cough is preserved in obstructed but is lost in strangulated hernias.
- # The hernia is tense in strangulation but not in obstruction.
- # Symptoms and signs of intestinal obstruction are present in obstructed hernias and maybe present in strangulated hernias.
- # The degree of shock and toxaemia are more severe in strangulated hernias.
- # However, both conditions are considered surgical emergencies and necessitate an urgent interference to relieve the cause of strangulation and to deal with the contents.

N.B. An enterocoele can be obstructed and can be strangulated while an omentocoele can only be strangulated as it has no lumen to be obstructed.
Q. What are the conditions that you may find strangulation without obstruction?
A. If the content of the hernia is one of the following:
1. Omentum
2. Part of the circumference of the intestinal lumen (Richter's hernia)
3. Michael's diverticulum (Littre's hernia)
4. Fallopian tube & ovary
5. Intestine, but there is an associated mesenteric vascular occlusion

Q. What is the treatment of this case of oblique inguinal hernia?
A.

- O.I.H. in children and adolescents ------------
  > Inguinal herniotomy
- O.I.H. in adults -------------------------->
  Inguinal herniorrhaphy
- O.I.H. in elderly and recurrent cases -------
  > Inguinal hernioplasty

Q. What is the principle of operation for inguinal hernia in children & adolescents?
A. Inguinal herniotomy, that is excision of the hernial sac. They do not need repair as they have very good muscles

Q. What is the principle of operation for O.I.H. in adults?
A. Excision of the sac + repair of the defect

Q. What are the principles of such repair?
A. Repair of the defect is done either by the local tissues (herniorrhaphy) or by adding a graft of
The principles in both herniorrhaphy and hernioplasty, in general, are the following:
1. Narrowing the internal ring.
2. Repair of the fascia transversalis, and;
3. Reinforcement of the posterior wall of the inguinal canal.

Q. What is the most popular type of repair?
A. Bassini repair.

Q. What is its principle?
A. Suturing the conjoined muscle to the inguinal ligament.

Q. What are the causes of recurrence of a hernia?
A.

- 1. Untreated preoperative condition: Chronic straining (asthmatic bronchitis, prostatic enlargement ....etc.), debility, obesity
- 2. Intraoperative causes: Improper haemostasis, tense repair, lax repair, repair with absorbable suture material
- 3. Postoperative causes: Haematoma, infection, early return to hard work

Case 2. PARAUMBILICAL HERNIA

Q. What is your diagnosis?
A. Paraumilical hernia, uncomplicated.

Q. What are the types of umbilical hernias you know?
A.
1. True umbilical hernias:
   i) Congenital umbilical hernia (exomphalos major
and minor)
ii) Infantile umbilical hernia (from weak umbilical cicatrix)
iii) Adult umbilical hernia (from increased intrabdominal pressure)
2. Paraumilical hernias : due to defect in linea alba close to umbilicus:
   1) Supraumbilical
   2) Infraumbilical

Q. Is it common for patients with PUH to complain of dyspepsia ?
A. Yes.

Q. Why ?
A. Due to traction on the greater omentum which is commonly the content of such a hernia.

Q. What is the commonest complication of paraumbilical hernia ?
A. Irreducibility, due to marked adhesions between the contents.

Q. What is the danger of such irreducibility ?
A. It predisposes to obstruction and strangulation.

Q. What is the treatment of this case ?
A. Herniorrhaphy.

Q. What type of repair do you do ?
A. It varies according to the size of the defect as follows :
   - Very small defect ---------> Anatomical repair
   - Small to Moderate defect ---------> Mayo's repair
   - Moderate to Large defect ---------> Hernioplasty (prolene mesh graft)
Q. How do you clinically differentiate between a paraumbilical and an epigastric hernia?
A. In paraumbilical hernia, the defect is close to the umbilicus so that the umbilicus forms a crescent at the edge of the sac, while in epigastric hernia, there is a bridge of normal abdominal muscles between the defect and the umbilicus. Besides, epigastric hernia could be multiple.

Q. What are the causes of incisional hernia?
A. There are:

1. Untreated preoperative condition: Chronic straining (asthmatic bronchitis, prostatic enlargement, etc.), debility, obesity
2. Intraoperative causes: Improper haemostasis, tense repair, lax repair, repair with absorbable suture material
3. Postoperative causes: Haematoma, infection, early return to hard work

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**Scrotal Swelling**

**Case 1. PRIMARY VARICOCELE**

Q. What is your diagnosis?
A. Left primary varicocoele.

Q. Why is this varicocoele?
A. Because there is an inguinoscrotal swelling characterized by:
* By inspection: Varicose veins are seen just beneath the skin of the scrotum (bag of worm appearance)
* By palpation: There are multiple soft,
compressible swellings with impulse and thrill on cough. They decrease in size on lying down and disappear on elevation of the scrotum.

**Q. What is the definition of varicocele?**
A. It is dilatation, elongation, and tortuosity of the pampiniform plexus of veins.

**Q. What are the types of varicocele?**
A. Primary and secondary varicocele.

**Q. How does hypernephroma produce secondary varicocele?**
A. By extension of tumour thrombus into the renal vein leading to obstruction of the testicular vein.

**Q. On which side is 2ry varicocele more common and why?**
A. On the left side, because the left testicular vein drains into the renal vein, while the right testicular vein drains into the inferior vena cava. So, 2ry varicocele on the left side occurs when there is tumour thrombosis of the left renal vein, whereas on the right side, thrombosis should extend to the IVC to occlude the right testicular vein.

**Q. Why 1ry varicocele is more common on the left side?**
A. Because of the following reasons:

1. The left testicular vein is longer than the right one (left testis lies at a lower level than the right one)
2. The left testicular vein opens at right angle into the left renal vein and no protective valve at this site
3. The left testicular vein lies beneath the sigmoid colon and may be liable to compression
4. The left renal vein passes in the angle between the aorta and the superior
mesenteric vein and this angle may be narrow and acts as a nutcracker causing compression of the vein.

5. The left common iliac vein is crossed by the right common iliac artery

Q. What are the complications of 1ry varicocoele?
A. 1. Recurrent attacks of thrombophlebitis.
   2. 2ry hydrocoele.
   3. Infertility (if there is serious depression of sperm count).
   5. Testicular atrophy (from prolonged congestion).

Q. What are the different lines of treatment of 1ry varicocoele?
A. 1. Conservative treatment for all cases.
   2. Operative treatment for some cases.

Q. What are the indications for surgery in 1ry varicocoele?
A. 1. Serious depression of spermatic count (oligospermia).
   2. Big painful varicocoele.

Q. Do you know the different approaches for varicocoele?
A. Yes, there are 4 approaches:
   1. Scrotal
   2. Inguinal
   3. Pelvic (Palomo op.)
   4. Laparoscopic

   Case 2. VAGINAL HYDROCOELE

Q. What is your diagnosis?
A. Rt. primary vaginal hydrocoele.
**Q. What are the types of hydrocoele?**


N.B. The so called diffuse hydrocoele of the cord is one of the forms of chronic filarial funiculitis. It is not a true hydrocoele but it is just a lymphoedema of the cord making it soft gelatinous in consistency.

**Q. What is vaginal hydrocoele?**

A. It is accumulation of serous fluid between the two layers of the tunica vaginalis.

**Q. What are its types?**

A. It is of two types:

1. 1ry vaginal hydrocoele : of unknown aetiology
2. 2ry vaginal hydrocoele : 2ry to any disease of the testis, epidedymis or spermatic cord.

**Q. How did you know that it is purely scrotal?**

A. By grasping the neck of the scrotum by two fingers; the thumb infront and the index finger behind the neck, it was found that the swelling is completely below the fingers.

**Q. How did you know that it is a cystic swelling?**

A. By doing the bipolar fluctuation test; One hand's fingers are placed around the neck of the scrotum, and the other hand's fingers hold the bottom of the swelling. The latter squeezes the swelling where an impulse is perceived by the other hand's fingers at the top of the swelling.
Q. What are the values of transillumination in hydrocoele?
A. It differentiates between hydrocoele which is translucent and other opaque cysts. It also localizes the testis in case of vaginal hydrocoele.

Q. What is the value of localizing the site of the testis in hydrocoele?
A. To avoid its injury if aspiration is done. The shape and size of the testis also could be assessed.

Q. How can you detect secondary vaginal hydrocoele?
A. By pinching the tunica vaginalis.

Q. What are the other intrascrotal cysts you know?
A. Spermatocoele, Pyocoele, Acute hematocoele, Encysted hydrocoele of the cord, Cystic teratoma, Breaking down gumma, Cysts of embryonic remnants of the epididymis.

Q. What is spermatocoele?
A. It is a retention cyst situated in the head of the epididymis due to obstruction of the vasa efferentia.

Q. What do you mean by transillumination is opalescent in spermatocoele?
A. This word means that the cyst is a midway between translucent and opaque.

Q. How can you explain this type of transillumination in spermatocoele?
A. It is due to its content of sperms.

Q. What are the complications of hydrocoele?
A. Complications of hydrocoele include:

1. Rupture by severe trauma
2. Haematocoele (spontaneous, trauma, aspiration)
3. Infection (----> pyocoele)
4. Calcification of the sac
5. Atrophy of the testis (in long standing cases)
6. Hernia of the hydrocoele (in long standing cases, through dartos muscle as a result of high tension)

Q. What are the lines of treatment of 1ry vaginal hydrocoele?
A. 1. Operation : The ideal treatment
2. Aspiration : In unfit patients

Q. What are the operations you know for 1ry vaginal hydrocoele?
A. 1. Excision of the tunica (if very large, thickened or calcified)
2. Eversion of the tunica (if not large, thickened or calcified)
3. Lord's operation (if not large, thickened or calcified)

Q. What are the complications of aspiration?
A. 1. Recurrence (100%).
2. Infection.
3. Haemorrhage.
4. Puncture of the testis.

Oral Questions on a Case of Goitre

Case 1. SIMPLE NODULAR GOITRE

Q. What is your diagnosis?
A. Simple nodular goitre.
Q. Why this is a goitre?
A. Because there is a swelling in the lower part of the front of the neck which is the anatomical site of the thyroid gland, having the shape of the thyroid gland (butterfly) and this swelling moves up and down with deglutition.

Q. Why does a goitre move up and down with deglutition?
A. Because the thyroid gland is enclosed within the pretracheal fascia which is attached to the thyroid cartilage and hyoid bones.

Q. Mention other swellings that move up and down with deglutition.
A. Subhyoid bursitis, prelaryngeal L.Ns., thyroglossal cyst, ectopic thyroid gland, pretracheal L.N., cold abscess of the larynx, parathyroid gland tumours, laryngocoele and tracheocoele.

Q. When doesn't the goitre move up and down with deglutition?
A. In 1) Huge goitre, 2) Malignant goitre and 3) Retrosternal goitre.

Q. Why this is a simple goitre?
A. Because there are no manifestations suggestive of thyrotoxicosis, no manifestations suggestive of malignancy and no manifestations suggestive of inflammation.

Q. What are the manifestations suspicious of malignancy in a goitre?
A.

- From history: Short duration or long duration with recent rapid enlargement in size, pain referred to the ear, hoarseness of voice, symptoms of distant metastases.
From examination: Hardness, fixity to the trachea, fixity to sternomastoid, attachment to the skin overlying, absent carotid pulse (Berry's sign), enlarged deep cervical lymph nodes, signs of distant metastases.

**Q. How would you elicit fixity to the trachea?**
A. By fixing the trachea by one hand and trying to move the gland up and down with the other hand, normally there is a slight range of movement.

**Q. How do you elicit fixity to the sternomastoid?**
A. By asking the patient to swallow while pinching the relaxed sternomastoid, normally I do not feel something pulling on the sternomastoid between my fingers.

**Q. Can the cervical L.Ns. develop secondaries from a thyroid carcinoma while the 1ry is not felt clinically?**
A. Yes, in occult papillary carcinoma of the thyroid gland. This was thought in the past as some form of ectopic thyroid gland and was called "lateral aberrant thyroid".

**Q. What are the manifestations suspicious of an inflammatory goitre?**
A.

- In acute and subacute thyroiditis: Short duration, pain, may be fever (with or without chills), warmth and tenderness over the gland.
- In Hashimoto thyroiditis: Locally the gland is very similar to S.N.G. but the course of the disease is characteristic; early there is thyrotoxicosis which is followed by hypothyroidism.
• In Riedle's thyroiditis: The gland is irregularly enlarged, hard, fixed to skin, trachea, and sternomastoid i.e. very similar to anaplastic carcinoma of the thyroid gland.

**Q. What is the aetiology of simple goitre?**

A. Simple goitre is due to stimulation of the thyroid gland by increased level of circulating T.S.H. secondary to low levels of circulating thyroid hormones secondary to either iodine deficiency or defective synthesis of thyroid hormones.

**Q. What are the causes of iodine deficiency?**

A. 1) Decreased intake as in endemic areas,
2) Increased demands as in periods of stress in the females (puberty, pregnancy, lactation),
3) Decreased absorption from the G.I.T.

**Q. What are the causes of defective synthesis of thyroid hormones?**

A. 1) Enzymatic deficiency, and 2) Goitrogens (Cabbage, P.A.S., antithyroid drugs and iodides in large amounts "iodide goitre")

**Q. What is Pendred's syndrome?**

A. This is a cretinoid goitre associated with deafness.

**Q. What is the cause of this goitre?**

A. Congenital deficiency of peroxidase enzyme.

**Q. What are the types of simple goitre?**

A. 1. Simple diffuse goitre (Physiological goitre)
2. Simple nodular goitre (S.N.G.).

Q. Which of them is reversible?
A. Physiological goitre can be reversible if the cause of iodine deficiency is eliminated.

Q. What are the complications of simple nodular goitre?
A. 1) Pressure on surrounding structures (dyspnoea and dysphagia), 2) Disfigurement, 3) 2ry toxic goitre (30%), 4) Haemorrhage in a cyst, and 5) Malignant transformation (1/2%), {Follicular Type}.

Q. How does a patient with a haemorrhage in a cyst present?
A. Sudden onset of dyspnoea.

Q. What is the cause of dyspnoea in such cases?
A. Sudden enlargement of the gland and more important is the reflex spasm of the pretracheal muscles.

Q. How do you manage such a patient?
A. Emergency needle aspiration.

Q. What investigations do you want to do for this patient with a goitre?
A. In addition to the routine laboratory investigations, we do thyroid function tests.

Q. What are the complications of subtotal thyroidectomy for S.N.G.?
A. Complication of subtotal thyroidectomy for S.N.G. include:

- 1. Tension haematoma (due to slipped ligature from the superior thyroid artery),
- 2. Dyspnoea
3. Injury to the related nerves: 1) recurrent laryngeal nerve, and 2) external laryngeal nerve.
4. Hypoparathyroidism (due to accidental removal of the parathyroid glands),
4. Hypothyroidism (if the gland was removed near totally and no postoperative replacement by thyroxin was given),
5. Recurrent goitre (if no postoperative thyroxin was given),

Q. What is the danger of haematoma after thyroidectomy?
A. It can lead to suffocation as it is enclosed within the pretracheal muscles.

Q. How do you treat it?
A. First, urgently, while the patient is in bed, the sutures are cut to relieve the tension and the patient is taken to the theatre to deal with the bleeder.

Q. What are the causes of dyspnoea after thyroidectomy?
A. 1) Tension haematoma, 2) Laryngeal oedema due to rough manipulations during the operation, 3) Bilateral recurrent laryngeal nerve injury, and 4) Tracheomalacia (very rare).

Q. What are the effects of RLN injury?
A. 
&Unilateral RLN injury ---------------> hoarseness of voice which is improved by time due to compensatory crossing of the contralateral cord to the other side.
&Bilateral RLN injury ----------------> Suffocation which should be treated at once by emergency tracheostomy.
Q. What is the effect of external laryngeal nerve injury?
A. Loss of high pitched voice due to paralysis of cricothyroid muscle.

Case 2. TOXIC GOITRE

Q. What is your diagnosis?
A1. Toxic diffuse goitre (1ry toxic goitre)
A2. Toxic nodular goitre (2ry toxic goitre)

Q. Why this is a goitre?
A. Because there is a swelling in the lower part of the front of the neck which is the anatomical site of the thyroid gland, having the shape of the thyroid gland (butterfly) and this swelling moves up and down with deglutition.

Q. Why it is toxic?
A. Because the patient has manifestations of thyrotoxicosis in the form of:

- From history: Palpitation, nervousness, irritability, intolerance to hot weather, increased appetite associated with loss of weight,
- From general examination: Tachycardia, arrhythmia, tremors, eye signs of thyrotoxicosis
- From local examination: Dilated veins, expansile pulsations, warmth, palpable thrill, audible bruit..

Q. What are the eye signs of thyrotoxicosis?
A.
1. Infrequent blinking (staring look)
2. Apparent rim of sclera above the cornea.
3. Lid lag: the upper lid does not follow the eyeball on looking down.
4. Absence of forehead corrugation on looking upwards
5. Absence of convergence on looking to a near object
6. Exophthalmos: A. Apparent exophthalmos B. True exophthalmos
7. Tremors of the eyelids

Q. What is the pathogenesis of each of these eye signs?
A. # Infrequent blinking, apparent rim of sclera above the cornea, lid lag and apparent exophthalmos are all due to upper eyelid retraction which is caused by spasm of Muller's muscle (thyroxine makes this muscle oversensitised to the effect of circulating catecholamines).
# Absence of forehead corrugation is caused by true exophthalmos.
# Absence of convergence on looking to a near object is due to paresis of the medial recti.
# True exophthalmos is due to exophthalmos producing substance which causes deposition of oedema fluid and round cell infiltration in the retro-orbital space.

Q. How to differentiate between true & apparent exophthalmos?
A. By 1) Naffziger's test; 2) Frazer's test; 3) Ruler test (See clinical notes for details of these tests)

Q. Define hyperthyroidism and thyrotoxicosis.
A. Hyperthyroidism is the term referred to the manifestations caused by the increased level of circulating thyroid hormones. Thyrotoxicosis is a syndrome consisting of manifestations caused by the increased level of circulating thyroid hormones as well as others that are not due to increased
level of circulating thyroid hormones (Exophthalmos and Pretibial myxoedema).

Q. What are the types of toxic goitre?
A. There are three types
1) Toxic diffuse goitre (1ry toxic goitre) (Grave's disease)
2) Toxic nodular goitre (2ry toxic goitre) (Plummer's disease)
3) Toxic nodule.

Q. Are there other causes of thyrotoxicosis?
A. Yes. the following are rare causes of thyrotoxicosis:
1. Thyrotoxicosis factitia: Due to intake of thyroxine (e.g. for weight reduction)
2. Infantile thyrotoxicosis: A baby born to a thyrotoxic mother
3. Jod Basedow disease: Due to high intake of iodides in a colloid goitre
4. De Quervain thyroiditis (in some cases)
5. Hashimoto thyroiditis (in early cases)
6. Some tumours secrete thyroxine e.g. struma ovarii.

Q. How do you treat a case of toxic nodular goitre (2ry toxic goitre)?
A. Subtotal thyroidectomy.

Q. How would you prepare a case of toxic goitre for operation?
A. 1. Antithyroid drugs e.g. Neomercazole until the patient is euthyroid,
   2. Propranolol (Inderal) for regulation of heart rate,
   3. Lugol's Iodine

Q. When do you contraindicate antithyroid drugs in preop. preparation?
A. In retrosternal goitre.

Q. Why?
A. Because antithyroid drugs cause enlargement of the thyroid gland which may lead to mediastinal syndrome.

Q. What is Lugol's iodine?
A. It is 5% iodine and 10% KI in water.

Q. What is its mechanism of its action?
A. 1) Inhibition of protease enzyme which releases thyroid hormones from thyroglobulin,
2) Inhibition of organic iodine formation,
3) Prevention of the stimulant effect of TSH on adenyl cyclase enzyme.

Q. What is the principle of subtotal thyroidectomy in toxic goitre?
A. Subtotal Thyroidectomy = Removal of both lobes + Isthmus, Leaving postero-medial part of the lobes on each side to protect the recurrent laryngeal nerve and parathyroid glands.

Q. What are the complications of subtotal thyroidectomy for toxic goitre?
A. 1. Tension haematoma (due to slipped ligature from the superior thyroid artery).
2. Dyspnoea.
3. Injury to the related nerves: i) recurrent laryngeal nerve, and ii) external laryngeal nerve.
4. Thyrotoxic crisis.
5. Hypoparathyroidism (due to accidental removal of the parathyroid glands).
6. Hypothyroidism in 20-30% (if the gland was removed near totally).
7. Recurrent thyrotoxicosis in 5-10% (If no adequate excision is done).

Q. What is thyrotoxic crisis?
A. It is an acute exacerbation of hyperthyroidism. It occurs if the patient is not adequately prepared for thyroidectomy.
Q. What are the manifestations of thyrotoxic crisis?
A. Hyperpyrexia, restlessness, severe tachycardia, and dehydration.

Q. Is it a dangerous condition?
A. Yes it is. Severe tachycardia may lead to heart failure and hyperpyrexia may lead to brain damage.

Q. What are the indications of antithyroid drugs in toxic nodular goitre?
A.
1. Preoperative preparation.
2. Children and adolescents (high incidence of recurrence if operated upon).
3. Refusal for surgery.

Q. Does radio-iodine has a role in the treatment of toxic nodular goitre?
A. No, radio-iodine is ineffective in toxic nodular goitre because of the fibrosis present in the gland.

Q. How do you treat a case of toxic nodule?
A. Surgery (hemithyroidectomy) is the main line of treatment. Medical treatment is indicated in preoperative preparation, in young patients and in patients refusing surgery or unfit for surgery. Radio-iodine can be given to patients over 45 years as an alternative to surgery.

Q. What is the mechanism of action of radioactive iodine in the treatment of toxic goitre?
A. Radioactive iodine emits beta rays which destroys the thyroid cells without affecting much the surrounding tissue due to their low
penetrability.

**Q. What type of radioactive iodine is given in the treatment of toxic goitre?**
A. I$^{131}$.  

**Q. Why I$^{131}$ and not I$^{123}$?**
A. Because I$^{131}$ can emit beta rays while I$^{123}$ can emit only gamma rays which are ineffective.

**Q. What is the dose of radioactive iodine in treatment of toxic goitre?**
A. 10 uCi (10 micro Curi).

**Q. What are the disadvantages of radioactive iodine?**
A. 1. Isotope facilities must be present.
   2. Indefinite follow up is essential.
   3. Thyroid insufficiency in 80% after 10 years.
   4. Recurrence of toxicity if low dose is given.
   5. Risk of inducing carcinoma in adults if given in childhood or adolescence (that is why it is not given for patients below 45 years).
   6. Risk of hypothyroidism and foetal anomalies if given in pregnancy.

**Q. What are the contraindications to radio-iodine?**
A. 1. During pregnancy (risk of foetal anomalies and foetal hypothyroidism).
   2. During lactation (risk of hypothyroidism to the baby).
   3. Young age (risk of inducing thyroid carcinoma).
   4. Toxic nodular goitre (ineffective).
   5. Iodine allergy.

**Q. What is the advantage of radio-iodine in a case of toxic nodule?**
A. No, because the thyroid tissue surrounding the toxic nodule is suppressed and so will not uptake iodine.
Oral Questions on a Case of Leg Ulcer

Case 1. POST-TRAUMATIC LEG ULCER

Q. What is your diagnosis?
A. A chronic post-traumatic (non-specific) leg ulcer in the (mention the region) of the Rt./Lt. leg.

Q. Why did you diagnose it non specific ulcer?
A. Because it has the following characters (in addition to a history of severe trauma):

- Site: It is commonest over shin of tibia
- Size: Any size
- Shape: Rounded, oval or irregular
- Edge: Sloping edge
- Floor: Shows healthy or unhealthy granulations which may be raised, flat or below surface
- Base: Indurated, may be fixed to the underlying bone
- Margin: May be pigmented
- Discharge: Serous or pus discharge
- Draining LNs.: Usually show secondary lymphadenitis

Q. What is the aetiology of this type of ulcers?
A. It is caused by wounds, burns, corrosives, radiation or traumatic gangrene including bedsore (decubitus ulcer), plaster sores and direct crushes.

Q. Why this type of ulcer has the tendency to become chronic?
A. It becomes chronic being maintained by repeated trauma, pyogenic infection and poor
blood supply from congestion caused by long sitting or standing.

**Q. What is indolent ulcer ?**
A. In very chronic ulcers with excess fibrosis base and edge become hard (callous) and such an ulcer resists healing and is called indolent ulcer.

**Q. What are the investigations required in this case ?**
A. Plain X ray tibia to show any bony involvement, culture and sensitivity to give the specific antibiotic, Biopsy from the edge to confirm the diagnosis. This is in addition to the routine investigations.

**Q. What is the treatment of this case ?**
A.
1. Conservative treatment: This is indicated in small ulcers, provided that they are not indolent. (i.e. not callous). Conservative treatment includes: rest, elevation of foot, avoid long sitting or standing, frequent dressings, pressure bandage, and antibiotics if indicated (according to culture and sensetivity).
2. Surgery: It is indicated in 1) large ulcers, 2) indolent ulcers. Surgery includes excision of the ulcer and covering the defect by a skin flap.

**Q. Why do you prefer a skin flap as the method of coverage ?**
A. Because skin grafts in the leg have the tendency to re-ulcerate (venous congestion, poor blood supply, frequent traumata,...)

**Q. What are the characters of venous ulcer ?**
A. Over the medial malleolus; surrounded by pigmentation, dermatitis, scaly skin and leg oedema; sloping edge; floor shows healthy or unhealthy granulations which may be raised, flat or below surface; indurated base, and serous or
Q. What is the aetiology of this type of ulcers?
A. It is caused by 1ry or 2ry varicose veins but more commonly with 2ry V.V (in postphlebitic limbs following D.V.T.).

Q. What are the trophic ulcers?
A. These are ulcers due to impaired nutrition of the skin. They include both ischaemic ulcers and neurotrophic ulcers.

Q. What is chronic osteomyelitis ulcer?
A. It develops at outer opening of osteomyelitis sinuses. There are multiple sinuses discharging sequestra.

Q. What are the malignant ulcers that can develop in the leg?
A. Malignant leg ulcers include:
   - a. Primary Skin Cancer: squamous cell carcinoma, melanoma
   - b. Marjolin's Ulcer: Squamous cell carcinoma in chronic ulcer, osteomyelitis sinus or old scar. It is a slowly growing malignancy
   - c. Ulcerating Deep Cancer as osteosarcoma, fibrosarcoma of bone or muscle

Q. Is it common to find distant metastases in Marjolin ulcer?
A. This is very rare because of the severe fibrosis surrounding the ulcer

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**Oral Questions on a Case of Cleft Lip & Palate**

**Case 1. CLEFT LIP**
Q. What is your diagnosis?
A. Unilateral incomplete simple cleft lip not associated with cleft palate.

Q. What do you mean by incomplete?
A. The cleft is not reaching the nostril floor.

Q. What do you mean by simple?
A. There is no associated cleft of the alveolar margin.

Q. Did you hear about cleft lower lip?
A. It is an extremely rare anomaly it is characterized by being median in position.

Q. What are the types of cleft palate you know?
A. Cleft uvula, cleft soft palate, incomplete cleft palate (Cleft soft and hard palate not reaching the alveolar margin), Complete cleft palate. Incomplete and complete cleft palate could be unilateral or bilateral.

Q. What do you mean by uni or bilateral cleft palate?
A. It depends on whether the mouth cavity is communicating with one or the two nasal cavities.

Q. When do you repair cleft lip?
A. At about the age of 3 months.

Q. Why this age specifically?
A. It is preferred not to do the operation before this age because at that age the Hb% is almost 10 gm% and the weight of the child is almost 10 bounds and this is optimum and safe for anaesthesia (in other words, the operation before this age is rather risky). On the other hand, the operation is preferred not
to be delayed after that age for the following reasons: 1) for the proper development of teeth, 2) for psychological relief of the parents' worry about their child and 3) for proper suckling (although the role played by the lip in suckling is not that considerable if compared with that of the palate).

Q. What is the principle of any operation described for the repair of cleft lip?
A. The principles for any repair of cleft lip are:
1. To bypass the defect: by suturing the muscles, skin and mucous membrane (3 layer closure)
2. To lengthen the lip: by interpositioning of flaps from both sides adjusting all esthetic points.

Q. What is the commonest operation for the repair of cleft lip?
A. Millard repair.

Q. Why not to do freshening and direct suture without the need to do rotation and advancement flaps?
A. This direct suture would produce what is called "a lip notch" because of the shortening of the lip at the edges of the cleft.

Q. What are the complications of cleft palate?
A. 1) Malnutrition due to improper suckling.
2) Repeated chest infection due to aspiration from regurgitated food and water
3) Speech abnormalities
4) Otitis media due to Eustachean tube obstruction by oedema around its mouth.

Q. What is the cause of improper suckling in cleft palate?
A. Failure to create an intraoral negative pressure.

Q. What are the speech abnormalities encountered in cleft palate?
A. 1) Nasal tone of speech (Rhinolalia) and 2) Inability to pronounce some syllables like K, L, Q.

**Q. At what age do you prefer to repair cleft palate ?**  
A. The repair of the most anterior palate can be done during the same operation of repair of the cleft lip, while the remaining posterior palate is repaired at about the age of 11/2 to 2 years.

**Q. Is it preferred to postpone the operation after the age of 2 years ?**  
A. No, because the speech abnormalities of the cleft palate become irreversible (Imprinted in the brain).

**Q. So, you mean if the patient presents to you at a later age, you do not recommend to do the operation ?**  
A. No, the operation is still recommended as it would prevent nasal regurgitation and might improve the nasal tone of speech.

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**Oral Questions on a Case of Hypospadias**

**Case 1. DISTAL SHAFT HYPOSPADIAS**

**Q. What is your diagnosis ?**  
A. Distal shaft hypospadias.

**Q. What other types of hypospadias do you know ?**  
A. Glandular, coronal, midpenile, posterior penile, penoscrotal, scrotal and perineal hypospadias.

**Q. What are other deformities that can be seen in the penis ?**
A. 1) The prepuce is incomplete on the ventral aspect, being represented as a dorsal hood,  
2) Chordee may be present especially in the posterior types.  
3) There may be meatal stenosis.  
4) The penis may be smaller in size (microphalus)  
5) May be deviation of the median raphe.

Q. What are the associated anomalies that can be seen in the testis and scrotum ?  
A. 1) Incompletely descended testis.  
2) Split scrotum.

Q. What is chordee ?  
A. It is the ventral curvature of the penis on erection.

Q. What is the principle of treatment of hypospadias ?  
A. Two things : 1) To correct (to release) the chordee (if present) by excision of the fibrous tissue causing this chordee. 2) To replace the missing urethra (urethroplasty)

Q. When do you prefer to repair hypospadias ?  
A. Before school age, between 4 to 5 years.

Q. Why this age in particular ?  
A. The repair is better not to be delayed after the age of school because the child develops psychological disturbances if he was admitted to school while he has hypospadias. On the other hand, before this time, the penis is not that developed to allow the operation to be done easily.

Q. How do you explain the psychological disturbances in hypospadias in school age children ?  
A. Due to the abnormal direction of the stream of urine, the child sprays urine on his clothes which makes him feels guilty and shy.
Dear Student,
Now it is your turn to ask me about what is wondering you !!! and I am going to answer. The following are questions frequently asked by the students and provided are their proper answers.

**Q. How should I appear in the oral exams ?**
A. You should appear gentle, polite, properly dressed, confident.

**Q. How should I talk ?**
A. You should talk clearly, slowly and concisely. DO NOT RUSH TO THE ANSWER, think for a while (few seconds) before you begin to answer the question. Also, do not move your hands describing what you are saying.

**Q. How should I listen to the professor's question ?**
A. You should be listening carefully, looking interested in what he is saying and NEVER INTERRUPT HIM/HER.

**Q. How should I behave to the examiner ?**
A. You should be stable, polite, do not smile too much, do not look miserable, do not be too friendly with the examiner, and NEVER SAY JOKES.

**Q. What to do if I cannot understand the question mentioned by the examiner ?**
A. Say "Sorry Sir, I could not understand this question ".

**Q. What to do if I have not the answer in mind ?**
A. Say "Sorry Sir, I do not know the answer of this question". NEVER EVER SUGGEST AN ANSWER, otherwise you may be trapped !!!!!

Q. What to do if I said an answer and the professor considered it incorrect although I can see it correct ?
A. This situation is very rare. Examiners ask you simple direct questions with basic standard answers. Examiners know better than you. So, NEVER ARGUE WITH THE EXAMINER.

Q. What are the statements that the examiners do not like to hear ?
A. Examiners hate to hear excuses of your lack of the answers, your repetition of the questions before you answer, saying irrelevant answers and saying jokes.

Q. Are there some attitudes that examiners do not like ?
A. Yes, the examiner might get mad at you if you try to deceive him (like saying an irrelevant answer), if you lie (like saying something that is clearly not present in the patient), if you try to look overconfident (like showing that you know better than the examiner) and if you try to make jokes.

Q. What are the materials and instruments that I should have with me in the clinical exam. ?
A. These include :

1. STETHOSCOPE 2. PHYGMOMANOMETER  
2. THERMOMETER 4. MEASURING TAPE 
5. METAL RULER 6. WOODEN TONGUE DEPRESSOR 
7. GLOVES 8. SKIN MARKER 
9. POCKET TORCH 10. MAGNIFYING LENS 
11. TENDON HAMMER 12. PINS
Q. What is the time allowed for me in the clinical exam to make the clinical sheet?
A. You are going to have 20-30 minutes in the long case exam and 10-15 minutes in the short case exam.

Q. Isn't that a short time?
A. Absolutely not, you will find it more than enough. Do not be afraid of this time factor.

Q. Do you have some advises for me in making the sheet?
A. Sit or stand on the right side of the patient. Do not sit on the patient's bed!!!!!. Do not take much time in the history taking, concentrate on the examination. Do not write down every word the patient says. You can keep some information in mind to write them later after finishing the sheet. You will have a time lapse between taking the sheet and getting examined,. So, do not waste your time writing every bit besides the patient. Lastly, Your sheet should be well organized.

Q. What is the usual first question said by the examiner?
A. The examiner either asks you to read the sheet or goes directly to "what is your diagnosis?".

Q. Do many examiners ask the students to show how they did examined the patient?
A. Yes, and you should be ready for that.

Q. What do I do if the examiner got mad at me due to any mistake done by me?
A. DO NOT PANIC. Be confident and calm. Some examiners may do this to test your self confidence. Q. My exam is going to be after few months, what do you advise me to do nowadays?
A. SHEETS......SHEETS....SHEETS. Go and do
some sheets to get trained. Every day after finishing your classes, go to the wards and select some patient and make an elaborate written sheet. Then, discuss the sheet with the resident or any of the staff members at that section. You will find all of them helpful. If you do not find one having time to help you, come to me and you are alwa