

# Surgery Mini-OSCE

## All Past-Year Questions

### 2014



By Your Sis: Ghada Odeh :)

A 45 YO female come to the clinic with continuous, throbbing painful swelling below her Rt. side of mandible, accompanied with foul-tasting discharge from floor of her mouth.



1. What's the Dx? **Sub-mandibular sialadenitis .**
  2. What's the most common risk factor?  
**Dehydration.**
  3. What's the cause?  
**Salivary duct obstructions (e.g. by stone; sialolithiasis), followed by ascending infection.**
  4. What's the investigation?  
**X-ray & CT may reveal the stone.**
  5. What's the tt?  
**Antibiotics (broad spectrum) + soft diet and plenty of fluids**  
**For the stone:** If the stone is within the gland treatment is excision of the gland, If it is within the duct treatment is removal of stone through floor of the mouth.
1. What's the most common infection?  
**The infecting organism is usually a staphylococcus.**

A 60 YO male pt complains of a painless swelling with a rubbery, hard consistence mass which grows slowly for 2 months on the side of his face, with normal facial nerve functions.



1. What's the affected organ? **Parotid Gland.**
2. What's the most likely Dx?  
**Parotid Pleomorphic adenoma.**
3. What's the specific histo-pathological appearance of the Dx? **Myxomatous cartilage-like appearance.**
4. Give another DDx for this pt?  
**Adenolymphoma (Warthin's tumor).**
5. Mention 2 non-invasive & one invasive investigation to confirm your Dx.
  1. **Non-invasive: US, MRI.**
  2. **Invasive: FNA**
6. What's the tt of choice? **Superficial Parotidectomy**
7. Mention 3 Complications after surgery.  
**Facial nerve palsy, bleeding , infection.**

Painless neck swelling. On examination; it was midline, firm, non-tender mass, elevated on protrusion of tongue.



1. What's the most probable Dx? **Thyroglossal Cyst.**
2. What's the bone involved? **Hyoid bone.**
3. Give 2 DDx?

**Dermoid cyst, Goitre, Lymph node (Delphian LN).**

4. If it was cystic, what's the congenital pathophysiology?  
**Persistence of thyroglossal tract.**

5. Name 2 possible complications.

**Fistula, infection, Malignant transformation.**

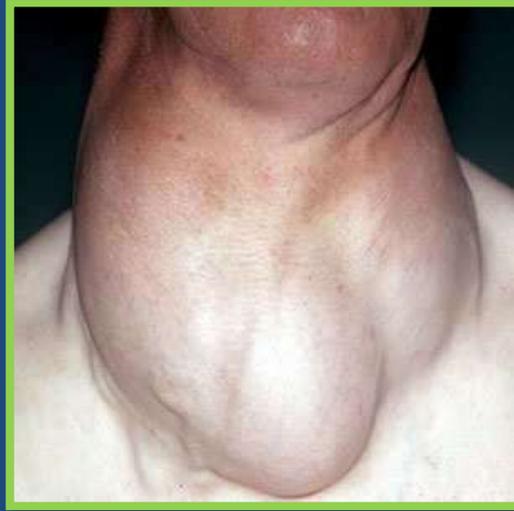
6. What's the most common age of presentation?

**In browse: between 15 and 30 years old.**

**In recall : around 5 years of age.**

1. What's the tt? **Surgical Resection (Sistrunk Procedure).**

A 75 YO pt presented with this neck mass.



1. What's the most probable Dx? **Goiter** (thyroid enlargement).
2. Mention the most important sign to prove its origin.  
**Moves with swallowing.**
3. What are the 2 important questions to suspect malignancy? **Hoarseness? Dysphagia? Dyspnea?**
4. Is there any sign you can see to suspect malignancy?  
**Lymph nodes enlargement.**

5. Mention 3 surgical causes for hyperthyroidism.

**Single benign thyroid adenoma, Toxic Multi-nodular Goiter, Grave's Disease**

6. If not treated, we are afraid from what?

**Thyrotoxic storm?**

7. What's the long term complication on the cardiovascular system?

**dilated cardiomyopathy, right heart failure with pulmonary hypertension, diastolic dysfunction, and atrial fibrillation**

8. For Grave's; name 2 investigations & 2 tt options.

**TFT, thyroid isotope scan.**

**Tt: Medical (PTU, methimazole), radioactive iodine ablation, surgery (total thyroidectomy).**

A baby was born with a flat perineum & meconium was coming with the urine.



1. What's your Dx? **Imperforate Anus.**
2. Why the meconium is coming with the urine? **Fistula.**
3. What's the urgent procedure must be done for him?  
**Temporary Diverting Colostomy.**
4. What's the definitive tt? **Neoanus (making a way through sphincter to the skin outside).**
5. At which age it must be done? **Usually at 1 yr of age.**

45 YO female, did thyroidectomy for papillary carcinoma. Mention 5 complications post-operatively.

1. Thyroid storm.
2. Hypocalcemia (hypoparathyroidism).
3. Hematoma.
4. Recurrent laryngeal nerve injury (Hoarseness of voice).
5. Wound infection.
6. Scar (cosmetic).





1. Identify this condition. **Branchial cleft cyst.**
2. What's the embryological origin of it?  
**Remnants of the 2<sup>nd</sup> or 3<sup>rd</sup> branchial cleft.**
3. What's the important nearby structure that is related to it?  
**Carotid artery (not facial nerve!).**
4. Mention a possible complication after surgery.  
**Infection, open into a sinus, malignancy.**
5. What's the investigation we do to confirm Dx before we send it to surgery? **Neck CT scan.**
6. What's your tt? **Surgical excision or resection.**

”وَكُنْ فِي الطَّرِيقِ عَفِيفَ الْخَطِيءِ...“

شَرِيفَ السَّمَاعِ كَرِيمَ النَّظَرِ

وَكُنْ رَجُلًا إِنْ أَتَوْا بَعْدَهُ .. يَقُولُونَ مَرَّةً  
وَهَذَا الْأَثَرُ“

.. لِيَكُنْ لَكَ #بَصْمَةٌ خَيْرَ أَيَّمَا حَلَّتْ

(:

This child presented with a swelling in his neck post URTI, it was firm, & tender.

1. What's your initial Dx?

**Lymphadenitis**

2. What's your management in this case? "1point"

**Antibiotics.**

3. If the child has fever, rigors, & appears toxic, fluctuation in the mass, what's your 2<sup>nd</sup> Dx?

**Abscess formation.**

4. What is your management for this case? "2points"

**Surgical drainage, IV antibiotic.**



This baby was born with this mass in his neck, it was partially compressible.

1. What's your Dx? **Cystic Hygroma.**
2. What's its embryological origin?  
**Collection of lymphatic sacs derived from lymph channels failed to connect.**
3. Give one DDx. **Lymphadenopathy.**
4. What's the pathognomonic sign of this condition on examination?  
**Bright Transillumination.**
5. What's the most common complication of this condition?  
**infection ?**

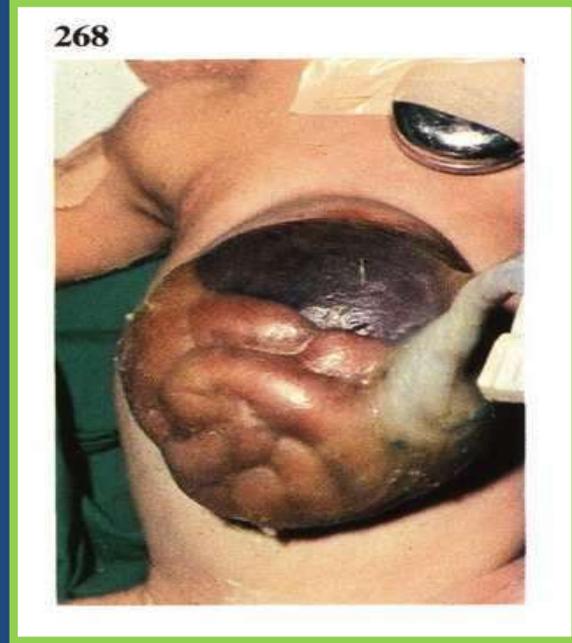




1. Identify this condition. **Rt. Cleft lip & palate.**
2. What's the best time to treat the lip defect? **3 mon.**
3. When is the time to treat the palate defect? **9 mon.**
4. Mention 2 possible complications of this condition?

**Feeding & breathing problems, Delay in speech,  
Recurrent ear infections.**

5. Name one syndrome associated with this anomaly?  
**Trisomy 13, Trisomy 18, Trisomy 21, Pierre robin sequence, Stickler, Shprintzen, Apert ...**
  
6. What is the probability of the 2<sup>nd</sup> child to have the same problem? **12–19%; any number between this range is right.**
  
7. Write 2 risk factors for this anomaly.  
**Folate deficiency, Maternal epilepsy, Drugs (steroid).**



1. What's your Dx? **Congenital Omphalocele.**
2. What's the pathophysiology of it? **failure of the bowel to return into the abdomen by 10-12 weeks.**
3. How can be detected antenatally & when? **By US, from 3<sup>rd</sup> month of pregnancy onwards, the further you proceed the better the ability to detect the defect.**
4. Give another DDx. **Gastroeschisis**
5. Which one of them is associated with more congenital anomalies? **Omphalocele (50%).**
6. What's the tt? **Fluid & electrolyte correction then surgical repair.**
7. Give 2 differences between 1 & 2.
  1. **Omphalocele: Covering membrane, Defect is at the umbilicus, Liver is usually protruded, More associated anomalies.**
  2. **Gastroeschisis: No coverings, Defect is lateral to (below & Rt. to) the umbilicus, Liver is Almost never found, less associated anomalies.**



1. What's the Dx? **Gastroschisis.**
2. What other DDx? **Ruptured Omphalocele.**
3. What's the commonest associated congenital anomaly? **Intestinal atresia.**
4. If it was diagnosed antenatally, is it indication for abortion ? **No.**
5. Give 2 causes of mortality in this case?  
**Hypothermia, Dehydration, contamination & infection, electrolytes imbalance.**

## Intussusception of the small bowel.



1. What's the most common age at presentation?  
**(8 -12) months.**
2. Mention 3 common symptoms at presentation.  
**Paroxysms of abdominal cramps, Intermittent vomiting, Bloody mucus (current-jelly stool).**
3. Mention one pathognomonic physical finding.  
**Mass in RUQ or epigastrium.**
4. Mention 2 main methods of tt.  
**Hydrostatic or Surgical reduction.**



1. What's the organ involved? **Kidney.**
2. What's your Dx.? **Wilm's tumor (Nephroblastoma).**
3. Give 2 DDX. **Neuroblastoma, Hydronephrosis.**
4. Give 2 investigations other than US to confirm Dx.  
**I.V.U., MRI**
5. What's the tx? **Nephrectomy.**

**A little boy with Lt. abdominal mass crossing the midline.**

**Q.  
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1. What's the most likely Dx? **Neuroblastoma.**
2. What's the tt? **Surgery -/+ Chemoradioimmunotherapy.**
3. Give 2 DDX. **WILMS tumor, Hydronephrotic kidney.**
4. Mention 2 tests to confirm the Dx.

**Bone marrow biopsy & Urine collection for VMA & metanephrines.**

( 25 )

إذا ركبت مع أوري وجدته خانساً منغمساً يقرأ  
في كتاب، وإذا ركبت مع عربي وجدته يتململ  
كالعاشق الهاوي، يتعرف على الركاب،  
ويسولف مع الأصحاب والأحباب.  
بيننا وبين الكتاب عقدة نفسية، ونحن أمة (اقرأ)،  
ولكن ثقلت علينا المعرفة، وخف علينا القيل  
والقال،

ولو سألت أكثر الشباب : ماذا قرأت اليوم ؟ وكم  
صفحة طالعت ؟ لوجدت الجواب : صفر

مكعباً!



1. Give 2 other sites you can examine.  
**Hand creases, Under the tongue.**
2. Why is this site is the best place to look for this state?  
**Because it's rich in elastic fibers (high affinity of bilirubin to elastin).**
3. Give 2 lab tests to confirm Dx.  
**CBC, LFT.**

4. What's the minimal bilirubin level to cause this state?  
**Higher than 2.5 mg/dL leads to jaundice.**
5. Name 2 causes of this condition.  
**Hemolysis, Biliary tract obstruction, Hepatitis, HCC.**
6. Mention 2 radiological test we can do to confirm Dx.  
**Abdominal US, MRCP.**
7. Mention one invasive investigation. **ERCP.**



1. Identify this condition.  
**Exophthalmous.**
2. Give one lab test you want to order.  
**Thyroid Function Test (TFT).**
3. Mention a radiological investigation.  
**Neck U/S.**
4. Mention 2 modalities of tt.
  1. **Medical: anti-thyroid drugs (PTU).**
  2. **Surgical: thyroidectomy.**



1. What's this? **Basal Cell Carcinoma.**
2. What's the DDX? **Squamous cell carcinoma.**
3. Mention the most important risk factor? **Long unprotected exposure to UV light.**
4. Describe the growth of it. **Slowly growing.**
5. What's the tx? **Excision, Skin grafting, Skin flaps.**

**Black skin lesion at the head. associated with itchiness, & increases in size.**



1. What's your Dx? **Malignant Melanoma.**
2. What's the Cause? **Malignant transformation of melanocytes by unprotected sun exposure.**
3. What's the Most common form? **Superficial spreading.**
4. Give 3 risk factors? **White skin, Sunburns, Solar or actinic keratosis, UV light, Family Hx.**
5. What's the tx? **Surgical resection with safe margin.**



1. What's your Dx? **Sebaceous cyst.**
2. Give a DDx. **Dermoid Cyst.**
3. How can you confirm your Dx by physical exam?  
**A visible punctum is only present in half of the cases, but it is a useful diagnostic sign.**  
**Contain sebum & don't transilluminate.**
4. What's your management? **Excision.**



1. What's this condition? **Hidradenitis Suppurativa.**
2. What's the tt? **Antibiotics, & Excesion if chronic.**
3. Mention another possible area that might have such lesion. **Groin area.**



1. What's the most likely Dx? **Keloid.**
2. What's the DDx? **Hypertrophic Scar.**
3. Mention one difference between previous answers.  
**Keloid: extend above & beyond the area of trauma/ recur.**  
**Hypertrophic scar: remains within the area of trauma/ not.**
4. Mention 3 susceptible areas for the Dx to happen.  
**Deltoid, Para-sternal area, Post-auricular area.**
5. Mention 2 modalities of tt.  
**Surgical: excision, Medical: steroid injection.**
6. Mention the most common complication after excision. **Recurrence.**

A 16 YO male pt presented with breast enlargement.  
Without tenderness or redness.



1. What's your Dx? **GYNECOMASTIA.**
2. Mention 2 causes for this situation.  
**Hypogonadism, Hyperthyroidism, Drugs, Liver failure & cirrhosis, Puberty (commonest cause among adolescents).**
3. What are the risk factors?  
**Adolescence, Older age, Use of anabolic steroids or androgens to enhance athletic performance.**
4. Name 1 long-term complication. **Malignancy.**
5. What's the tt? **Tt of the underlying cause, if persist Mastectomy (not sure).**

A 45 YO female pt, complains of bloody nipple discharge.

Q.  
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1. What's the most common Dx?
2. What's the cause of bleeding in this case “pathophysiology”?
3. Mention 2 other DDx for this condition.
4. Give 2 radiological investigations for this pt.
5. What's the tt of choice in this pt?
6. Mention 2 features of malignant discharge.

## Answers

1. Intra-ductal Papilloma (it's a benign tumor).
2. Invasion of basement membrane.
3. Trauma, Intra-ductal carcinoma.
4. US & Mammogram.
5. Central duct resection.
6. Unilateral, Spontaneous.

A non-lactating lady with white nipple discharge.



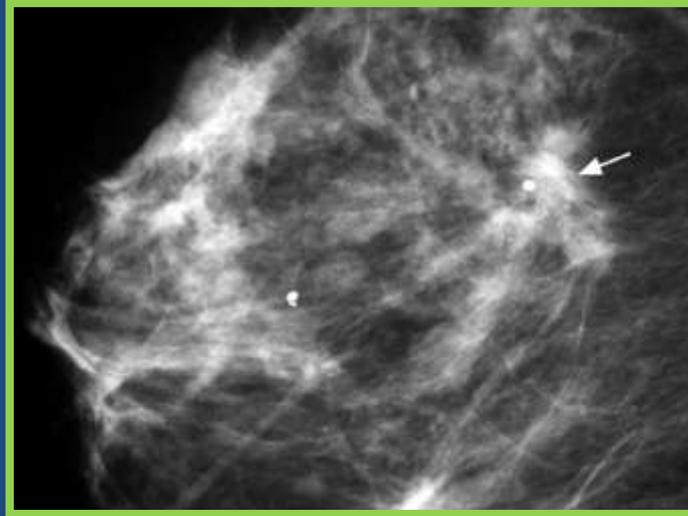
1. What's your Dx? **Galactorrhea.**
2. What's the underlying pathology? (2 points)  
**Hyperprolactinemia, Hypothyroidism (not sure).**
3. Give 2 investigations.  
**TFT, Prolactin level, Brain MRI.**



1. What are 2 signs of malignancy that you can see?  
**Nipple retraction, Puckering.**
2. Define N2, N3.  
**N2: Fixed axillary LNs./N3: Palpable supraclavicular LNs.**
3. What's the most common histological type of breast cancer? **Infiltrative ductal CA (not NOS).**

4. What's the most common sub-type?  
**Non otherwise specified.**
5. Mention 2 histobiochemistry (receptors to test)!  
**HER2/NEU, Estrogen & Progesterone receptors.**
6. Mention 2 investigations.  
**US, Mammogram.**
7. Is tt of choice chemo or anti-estrogen? **Chemo.**
8. What is the definition of Sentinel L.N?  
**The 1<sup>st</sup> lymph node or group of nodes draining a CA.**
9. Name 2 risk factors of breast CA.
  - **Nulliparity.**
  - **Early age of menarche & late age of menopause.**

A 47YO female complaining of a painful lump in her Lt. breast.  
A mammogram of the breast is shown.



1. Mention 2 histological features suggest malignancy.  
**Poor differentiation of tubules, High mitotic count, Nuclear pleomorphsim, High amount of necrosis, Calcifications.**
2. What are the modalities of management for this pt?  
**Hormonal tt, radiotherapy, chemotherapy, radical mastectomy.**

Q.  
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A 32 YO female with 3 days duration of this condition.



1. What's your Dx? **Acute Mastitis.**
2. What's the most common predisposing factor? **Lactation.**
3. Give another DDx. **Breast Abscess, inflammatory breast cancer**
4. What's the most common organism responsible of this? **Staphylococcus aureus.**
5. If this pt is above 50YO, mention 2 predisposing factors. **Duct ectasia, DM or immunocompromized state.**
6. What' s the tt? **Stop lactation, breast pump, apply heat, Antibiotics.**

A 65 YO male sits on his bed 2 months because of a stroke. After that this ulcer is seen at his back.



1. What's your Dx? **Pressure ulcer.**
2. What are the most common risk factors?  
**Bed set, DM, Atherosclerosis.**
3. What other places you can see the same ulcers? **Elbow joints, ankle joints.**



1. What's your Dx? **Anal fissure.**
2. What's the most common complication of this Dx? **Pain persistence & recurrence.**
3. What's the type of pain? **Burning in nature.**
4. What's the Conservative & Definitive tt?  
**Conservative: Sitz baths, Laxatives.**  
**Definitive: lateral partial internal sphincterotomy.**
5. Give another surgical tt. **Dilatation under GA.**

A 28 YO man with Hx of chronic constipation, presents to the ER complaining of anal pain for 2 wks. The pain relieved by laxative but it returns worse than before.

Q.  
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1. What's this condition? **Perianal Abscess.**
2. What do you see? **Perianal lump with surrounding erythema.**
3. What's the pathophysiology of it? **Crypto-glandulitis.**
4. Mention 1 other DDx? **Perianal Hematoma**
5. What's the character of pain caused by it? **Throbbing.**
6. What's the tt? **Incision & drainage, IV antibiotics, tt of the underlying cause.**
7. What's the most common complication after tt? **Perianal Fistula.**
8. What's the rare complication that we are afraid of & may kill the pt if he is Immunocompromised? **Fournier gangrene.**



1. Identify this condition. **Perianal Fistula.**
2. What's the most common symptom the pt comes with? **Soiling (discharge on the underwear).**
3. Give 2 complications of this condition. **Abscess, CA.**
4. What's the tt? **Marsupialization +/-Seton placement.**
5. What's the complication after tt? **Incontinence.**
6. What's the complication if not tt? **Malignancy.**

A 70 YO pt presented with this mass PR.



1. What's this condition? **Rectal Prolapse.**
2. Mention 2 common complications. **Ulceration, Bleeding, Infection, fecal incontinence.**
3. What's the effect of this condition on defecation? **Feeling of incomplete emptying**
4. What other 2 possible complaints beside a mass that comes out? **Tenismus, bleeding PR.**
5. What's the tt? (name the surgery) **Rectopexy.**

A 80 YO female presented with a bulge in her Lt. groin area that is partially reducible.



1. Mention 2 DDx.

**Femoral Hernia, Inguinal Hernia.**

2. Mention one way in examining the pt to differentiate between the 2 conditions.

**Identify pubic tubercle; then in femoral hernia the bulge in below & lateral.**

3. Mention 2 complications. **Stangulation, Obstruction.**

10 YO male with Feeling of heaviness in the testicle.



1. What's your Dx? **Varicocele.**
2. Mention a non-invasive test. **Doppler US.**
3. How is the pain in the scrotum?  
**Dragging-like or aching pain.**

A pic. during surgery for a child with Hx of empty scrotum (the testis & cord were taken out to be fixed).

1. What's the Dx?

**Undescended testis (Cryptorchidism).**

2. Mention 2 predisposing factors for this condition.

**Prematurity & LBW, DM & obesity of the mother.**

3. What's the name of the procedure? **Orchidopexy.**

4. Mention 2 complications if untreated.

**Infertility, Malignancy.**

5. Before what age should this surgery be done?

**In the past it was up to 1 yr, recently it's changed to (up to 6 months).**

A bulge on the scrotum of a child, becomes more prominent upon crying.



1. What's the most possible Dx?

**Indirect inguinal hernia.**

2. Give 2 DDx. **Hydrocele/ Inguinal hernia.**

3. How can you differentiate between your DDx by physical exam ? (4points)

**Hydrocele: not reducible, transilluminate, no cough impulse ...**

4. What's the initial tt? **Try to reduce it manually, if not reduced, give the pt sedative (to relax the skeletal muscles & hernia will be reduced subsequently), NPO, IVF, NGT & prepare for surgery as soon as possible.**

5. What's the definitive tt & when? **Herniotomy.**

6. What's the complication that we are afraid of? **Strangulation.**

This catheter was inserted to treat a common urological problem.



1. What's the name of this tube? **Supra-pubic catheter.**
2. Mention one indication to insert this tube.  
**Infra-vesical obstruction, acute urine retentions.**
3. Mention 3 potential complications.  
**UTI, Bleeding, Stone formation.**

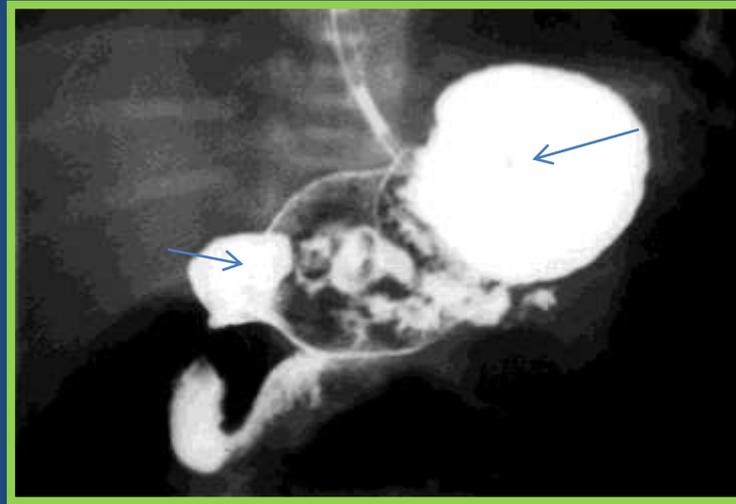
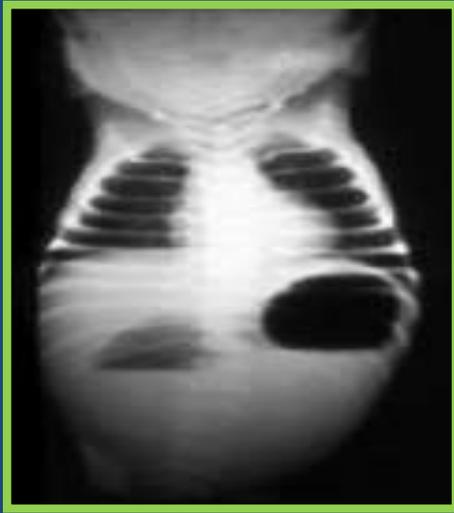
A 70 YO man complaining of intermittent sharp abdominal pain. He has not opened his bowels for 5 days. He has a Hx. of chronic constipation. On Examination His BP is 110/74 mmHg & the pulse rate is 112/min. His temperature is 37.8°C. There is gross abdominal distension with tenderness, most marked on the Lt. side. The abdomen is resonant to percussion & DRE reveals an empty rectum.



1. What does the abdominal X-ray show? -Be specific-  
**Omega loop (grossly dilated sigmoid colon).**
2. What's the Dx? **Sigmoid volvulus.**
3. What other radiological investigation could be employed if Dx was in doubt? **Barium enema.**
4. Mention 2 steps of how should the pt be managed?
  1. **NPO, IVF, Blood samples.**
  2. **Rigid sigmoidoscopy & insersion of a flatus tube.**
5. What's the definitive tt? **Surgery (operative reduction).**

# Abdominal X-ray for newborn failed to pass meconium.

Q.  
40



The 2 arrows point to Stomach & Duodenum.

1. Identify the condition. **Duodenal Atresia** (double-bubble sign & narrowing in 2<sup>nd</sup> portion of the duodenum).
2. Identify the causes. **Congenital**.
3. What Investigations to do? **Plain x-ray [erect & supine]**.
4. Name a suspicious finding in maternal Hx. **Polyhydramnios**.
5. Name 1 associated congenital anomaly. Cardiac anomalies.
6. What's the tt? **Supportive [NG tube, IV fluid normal saline, antibiotics]. Surgical [duodeno-duodenostomy]**.

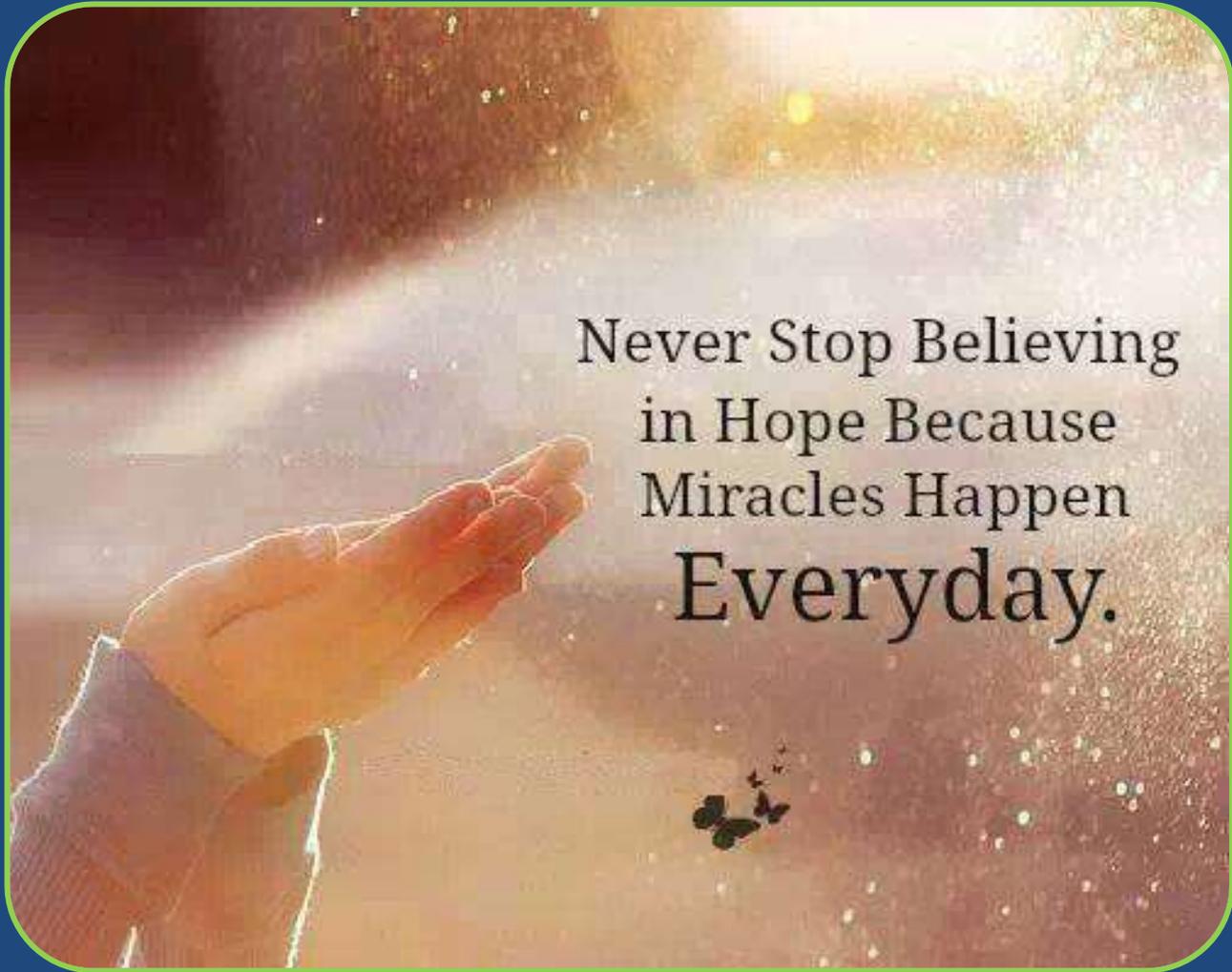
A 47 YO male, who has this situation in his Leg.

Q.  
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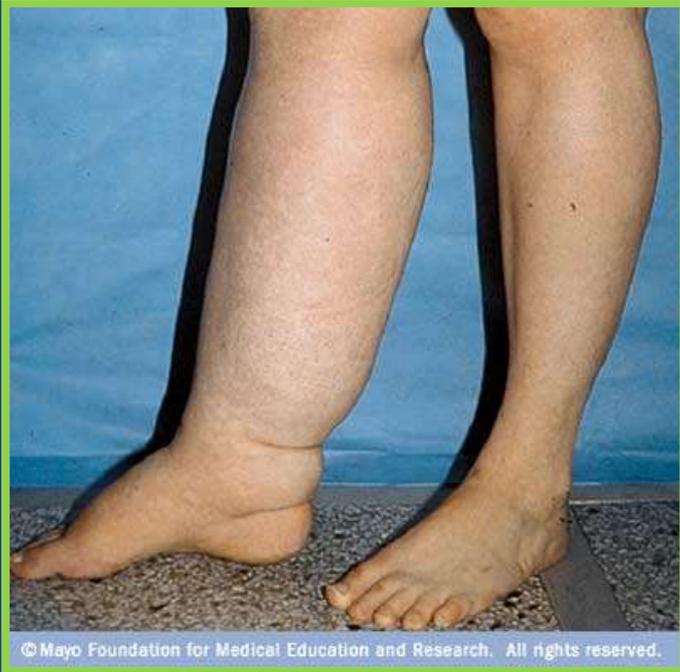
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1. What's your Dx? **Varicose vein.**
2. What's the most common system affected?  
**Superficial vein system.**
3. The most common vein affected? **Saphenous vein.**
4. What type of superficial vein involved in (A)? **Non-truncular varicose veins (reticular veins).**
5. What's the non-invasive investigation (Golden Slandered)? **Doppler US.**
6. Name one complication. **Ulceration.**
7. What's the tt? **Elastic stocking, Stripping of the veins, sclerotherapy, endovenous thermal ablation.**
8. Mention 2 indications of surgery.  
**Intractable heaviness or discomfort, Cosmetic.**



Never Stop Believing  
in Hope Because  
Miracles Happen  
**Everyday.**





1. What's the clinical sign? **Lymphedema.**
2. What's the cause?
  - ✓ **Primary (congenital, tarda,..).**
  - ✓ **Secondary (radiation, inguinal LNs resection,..).**
3. Mention 2 Complication?  
**Cellulitis, Lymphangitis, lymphadinitis, and in severe cases, skin ulcers.**

## A leg with Hx of crashed injury for 8 hours .



1. What's the procedure in the figure ? **Fasciotomy.**
2. What's the cause of doing this procedure?  
**Compartment syndrome.**
3. Mention 2 other clinical settings cause the same condition. **Severe burns, arterial injury.**
4. What's the indication for surgery?



1. What's your Dx? **Umbilical Granuloma.**
2. What's the most important DDx? **Umbilical Polyp.**
3. What's the tx? **Cautery or cut (surgical resection).**
4. Give a long term complication.

**Sepsis, portal vein infection (cavernous malformation).**

25 YO man was involved in a motor vehicle collision. He was an unrestrained passenger who was ejected from the vehicle.

Q.  
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( 64 )

1. What's your Dx? **Rt. Sided tension pneumothorax.**

2. What's the mechanism of this Dx?

**Injury in the visceral pleura acts as one-way valve, Air is unable to escape from inside the pleural space, Buildup of air under pressure in the pleural cavity.**

3. Give 2 abnormalities in this X-ray.

**Lt. sided tracheal deviation, Rt. Hyper-lucency.**

4. What's the most common cause of death associated with this condition (pathophysiology)?

**Hypoxia which is a combined effect of VQ mismatch and decreased venous return.**

5. What's the immediate tt? **Needle thoracostomy.**

6. What's the definite tt? **Tube thoracostomy (chest tube).**

7. Give 3 findings in physical exam.
  1. **Distended neck veins.**
  2. **Hyper-resonance on percussion.**
  3. **Hypotension & distant heart sounds.**
  
8. What's the cause of primary spontaneous pneumothorax?

It occurs from the rupture of asymptomatic blebs and bullae, causing air to leak into the pleural space.
  
9. If the problem recurs after 6 months, what you will do to the pt? **VATS & pluerodesis.**

\*Note that a possible complication of pneumothorax is >> Tension pneumothorax & death.

Hx. of a pt complaining of vomiting, abdominal pain, distension, Constipation with a Hx of surgery & her abdomen X-ray shows multiple air fluid levels.

1. What's the initial Dx?  
**Intestinal obstruction.**
2. What's the most common cause?  
**Adhesions.**
3. What's the initial tt?  
**Conservative tt; IV fluids & NPO for 1 day & if not getting better do surgery (adhesiolysis).**



# An X-ray of barium swallow Showing Esophagus.

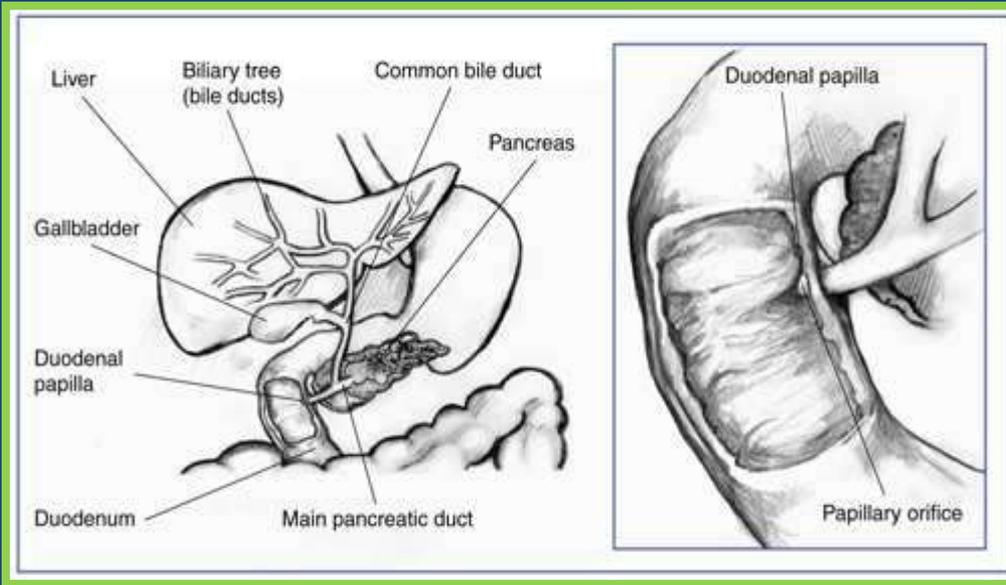


1. Give 2 radiological signs.  
**Bird Peak sign, & dilatation of the esophagus.**
2. What's your Dx? **Achalasia.**
3. Mention 2 invasive tt modalities in this case.  
**Heller's myotomy, Balloon dilatation.**
4. What is the most serious complication of the Dx?  
**Esophageal Cancer.**



1. What's this procedure? **ERCP.**
2. Give 2 Indications for it.  
**Diagnostic (Obstructive jaundice, take biopsy...).**  
**Therapeutic (stone removal, stent insertion, ...).**
3. Give 2 Findings in the picture (not this one).
4. Give 2 Complications.  
**CBD injury, Ascending pancreatitis, hemorrhage, perforation.**

## ERCP pic with multiple arrows.

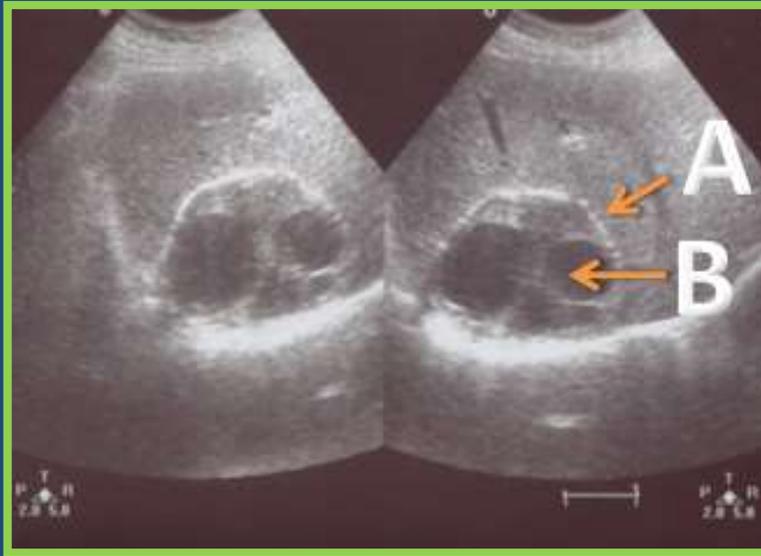


Name the anatomical structure.

Gallbladder, ERCP probe "which most of the students get it wrong", Main pancreatic duct, Common hepatic duct.

A 24 YO woman with RUQ abdominal pain for 6 months,  
this shows liver.

Q.  
52



1. What's your Dx.? **Hydatid Cyst.**
2. Mention 2 causative pathogens (organisms).  
**E. Granulosus, E. multilocularis.**
3. Mention 3 complications.  
**Infection (Abscess), Rupture intra-(biliary, pleura, peritoneum, cardiac), Anaphylactic shock, Obstructive Jaundice.**

4. Name a biochemical test that you will use to confirm the Dx.

**ELISA (Indirect hemagglutination & latex agglutination).**

5. What are the parts at A & B?

**A:Pericyst. B:Endocyst (Daughter cyst).**

6. After few days the pt started to complain of jaundice, biliary colic & urticaria. What's the cause of these symptoms? **Biliary rupture.**

7. Mention 3 characteristic of hydatid fluid.

**Colorless, Opalescent, Alkaline.**

8. Mention 2 adjuvant drugs used in tt.

**Albendazole, Mebandazole.**

9. If cyst ruptures, what happen for each one:

Brain: decreased level of consciousness?  
headache? Dizziness?

Lung: Expectoration of cyst membranes and fluid in  
intra bronchial rupture, cough, dyspnea..

Vascular: Anaphylaxis.

Biliary tree: erode biliary radicals & form a  
communication between cyst itself & CBD &  
daughter cysts impact there & obstruct it & causes  
obstructive jaundice / cholangitis.

Peritoneum: peritonitis.

Pericardium: Pericarditis/pericardial effusion.

A pt present to ER due to needle swallowing, asymptomatic, on X-ray the needle appears on the stomach (antrum).

1. What's next step in your management in this pt?  
**Upper endoscopy.**
2. Give 2 complications for this case?  
**Perforation, bleeding, obstruction.**
3. Mention 2 sites in which the needle most likely trapped in?  
**Pyloric canal, Iliocecal valve.**



**A 40 YO male pt, smoker, on aspirin for long time, who presented with sudden onset epigastric pain.**

**Q.  
54**

1. What's the abnormality seen on this standing CXR? **Air under Rt. diaphragm.**
2. What's the most likely cause?  
**Perforated viscus (perforated peptic ulcer).**
3. Mention 3 signs upon abdominal examination? **Guarding, Tenderness, Rigidity, Absent bowel sounds.**
4. How would you manage the pt initially? (2 points) **Keep pt NPO, Decompress using NGT, Give IV ABs.**
5. What's the definitive tt? **Laparotomy with omentoplasty.**



4. What's the most important physical sign?

**Rigidity or board-like rigidity (Note that tenderness or tenderness & rigidity → wrong).**

5. What's the tt?

**Surgery (laparotomy or laparotomy & patch repair).**

Hx goes with acute intestinal obstruction in a pt with Hx of appendectomy.



1. What's the cause of his intestinal obstruction?  
**Adhesions.**
2. Is this cause preventable? **No.**
3. What's the name of the part pointed to with the arrow? **Site of adhesion (obstruction).**
4. What's the clinical pic. Of pt? **Abdominal pain & distension, vomiting & late constipation.**

A lady was in ovarian cyst surgery, & was found to have that incidentally.



1. What's your Dx? **Meckel's Diverticulum.**
2. What's its embryological origin?  
**Remnant of the omphalomesenteric duct.**
3. Give 3 complications.  
**Infection (diverticulitis), perforation, bleeding, intestinal obstruction.**
4. What's your management?
5. Where is the commonest location? **In the small bowel (terminal ileum within 2 feet from IC valve).**
6. What's its relation to the mesentery?  
**Antimesenteric border.**
7. What's the type of this diverticulum?  
**Congenital (True).**

This pt had RTA , with distended jugular veins.



1. What's your DDX?

**Tension pneumothorax/ hemothorax, cardiac tamponade.**

2. How you can differentiate between your DDX by physical exam?

**Pneumothorax: hyper-resonance on percussion, decreased or no air entry.**

**Cardiac tamponade: muffled heart sounds, elevated JVP.**

3. What's your management? **ABC, Chest tube/pericardiocentesis.**



1. What can you see? **Cholesterol GBS.**
2. Mention 2 other types of stones. **Mixed, Pigmented.**
3. Mention risk factors for this disease.
  1. **Obesity.**
  2. **Female, fertile, forty...**
4. What's the most sensitive investigation to be done?  
**Abdominal US.**

5. Mention 2 complications for this conditions.

**Acute Cholecystitis, Acute Pancreatitis, Obstructive Jaundice.**

6. What's the physical sign can be founded in this pt related to his breathing? **Murphy's sign.**

7. What is the definitive tt? **Cholecystectomy.**

8. Mention indications of urgent cholecystectomy.

**Done only when pyrexia and tachycardia don't subside in the first few hours and the patient develops rigors and tender mass in RUQ, because this indicates the formation of empyema and an increased risk of perforation**

Ulceration & stricture in lower esophagus, by biopsy it's premalignant. Pt has solid food dysphagia for 3 mon.

1. What's your Dx? **Barrett's esophagus.**
2. What's the histological change? **Metaplasia** (replacement of the normal stratified squamous epithelium lining of the esophagus by simple columnar epithelium).
3. What do you think the cause of dysphagia? **Esophageal stricture, Esophageal CA.**
4. What's the underlying disease? **GERD, Esophagitis.**
5. What's the most common presenting symptom for the malignant disease? **Progressive dysphagia.**
6. What's the histological subtype of the malignant disease? **Adenocarcinoma.**
7. How to assess T & N of esophageal CA? **Endoscopic US.**



6. What's the pathophysiology of the Dx?

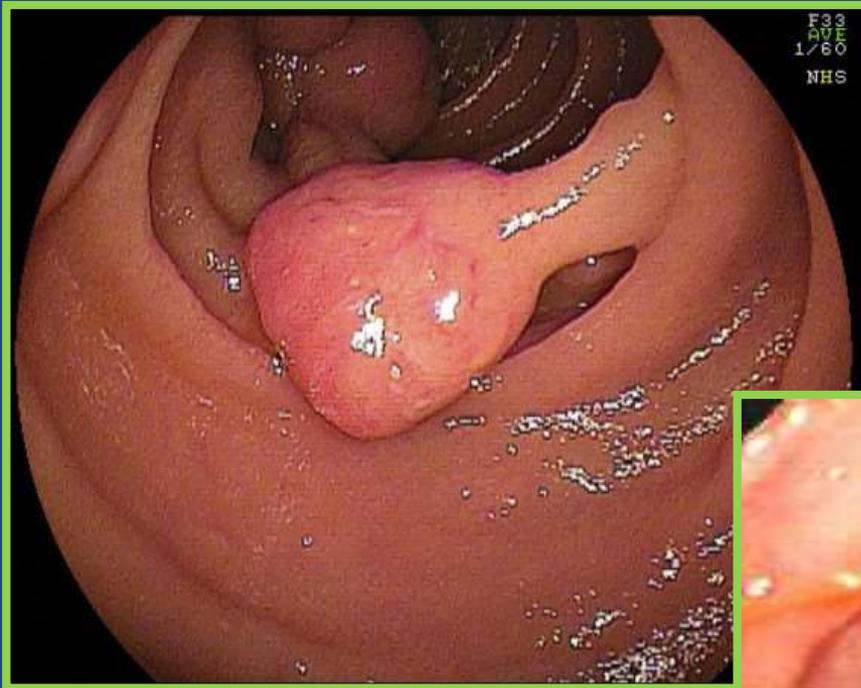
**Metaplasia of the squamous epithelium of the esophagus to become columnar.**

7. Do u want to follow up? why?

**Yes, due to risk of adenocarcinoma.**

# Lady with a mass in colon.

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60

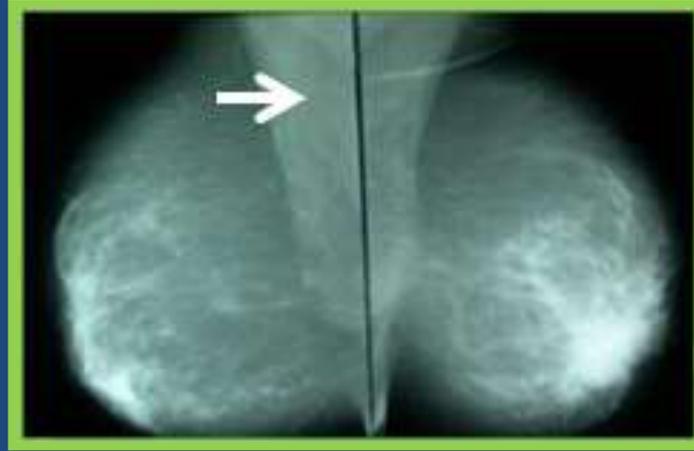


1. Describe this lesion.  
**Fungating mass in colon! (Colon polyp).**
2. What's the histopathological type for this lesion?  
**Adenomatous polyp.**
3. What are the most common histological sub-type?  
**Tubular polyp (85% of adenomatous polyps).**
4. What other 2 histological sub-types?  
**Villous, Tubulo-villous.**
5. What's the most common symptom of this condition?  
**Bleeding per rectum.**
6. What's the metabolic disorder that is associated with it?  
**Hypokalemia.**
7. What's the risk of leaving it?  
**Malignant conversion (Colon Ca).**
7. What's your management?  
**Surgery & adjuvant or neoadjuvant chemoradiotherapy.**

## A case suggested colorectal cancer.

1. What's the most common histological type of polyp?  
**Adenomatous polyp.**
2. Mention 3 other histological types.
  1. **Hyperplastic.**
  2. **Hamartomatous.**
  3. **Inflammatory.**
3. What's the most risky type (transform into malignancy)?  
**Adenomatous (mostly of Villous type).**
4. Where is the most common site of polyps? **Sigmoid colon or Rectosigmoid area.**





1. What's the structure pointed by arrow? **Pectoralis major muscle.**
2. What's the next step? **FNA cytology or core biopsy (incisional or excisional biopsy are wrong).**
3. Histologically, it was medullary CA stage II, choose the best tt? A: Chemotherapy B: Tamoxifen C: Radiotherapy D: ... (**A: chemotherapy**).
4. What's the most important prognostic factor in early breast CA? **Ipsilateral axillary LN involvement.**

الإسلام بالنسبة إليّ هو كلمة أخرى لمعاني كل ما هو خير  
و نبيل ، إنه اسم للوعد والأمل بمستقبل أفضل للشعوب  
المسلمة في العالم ، وفي حقهم بالعيش بحرية كاملة ، وفي  
كل ما هو جدير بأن يحيا المرء من أجله ..  
\* عزت بيجوفيتش



## Give a Spot Dx.

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63



1. Internal hernia or congenital band.
2. Epigastric hernia.
3. Para-umbilical hernia.
4. Right inguinal hernia.

Give a Spot Dx.  
**Strawberry Hemangioma.**

Q.  
64



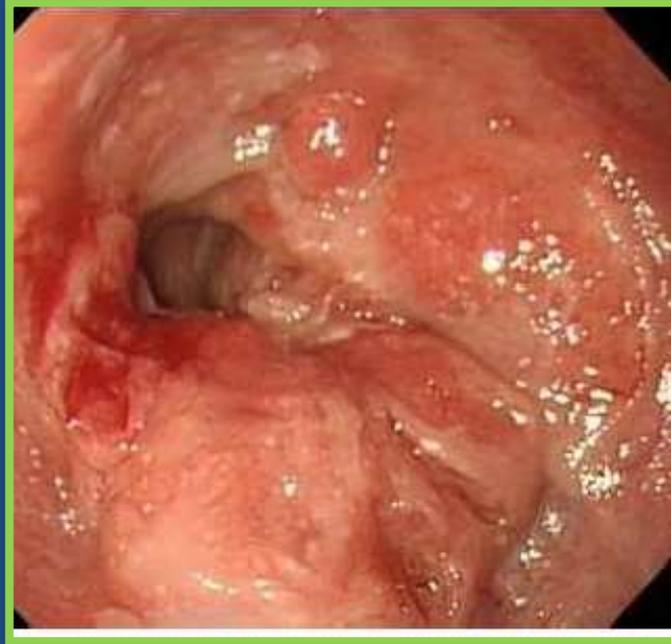


1. What's the Dx? **Multiple neurofibromatosis.**
2. What's the mode of inheritance? **AD.**
3. Give one endocrine problem may be presented.  
**Pheochromocytoma.**
4. Does this pt have risk of sarcoma? **Yes.**

**A pic of an operation of a pt diagnosed to have Esophageal CA.**

1. What's the most common symptom this pt come with? **Progressive Dysphagia.**
2. What's the most important investigation? **Upper GI Endoscopy.**
3. Mention 2 organs used to replace esophagus. **Stomach, Colon.**
4. What's the most dangerous complication of this surgery? **Leakage & Mediastinitis.**

A pt with progressive dysphagia to fluids only.



1. What's your Dx? **Esophageal CA.**
2. Give other 2 investigations. **Double-contrast Barium swallow, Endoscopic US, CT chest & abdomen.**
3. Give 2 modalities of tt.

**Esophagectomy with gastric pull-up, Chemo-radiation, esophageal stent for palliation.**



1. Name of this abnormality. **Pectus Excavatum.**
2. Mention 2 Investigations. **CXR, CT.**
3. Mention 2 evaluation tests. **PFT, Echo.**
4. Give One indication for surgery? **Dyspnea.**



1. What's this? **3-ways Foley's catheter.**
2. Give 3 indications.

**Hematuria, urine retention, bladder surgery, comatose & ICU patients** (actually only hematuria is indication for 3 ways catheter & the others for 2 ways catheters).

3. Give 2 complications.

**Infection, chronic irritation resulting in increasing risk for bladder cancer, injury to the sphincter ending with incontinence.**

4. If u fail catheterization, what will u do? **Supra-pubic.**
5. How do u know that u pass it successfully?  
**Urine comes out.**

## 9 YO boy. Hot water spilled on his Rt. Limb.



1. What's this burn called? **Scaled burn.**
2. What percentage of burn of Rt. upper limb for this age? **9 %.**
3. What's the possible complication? **Keloid.**
4. What's the degree? **Deep partial burn.**
5. What's the definitive tt? **Plastic surgery.**

A 20 YO male pt with bilateral upper limbs scald burn.



1. What's the % of burned surface area in this pt? **18%**
2. Mention one complication can happen in this pt.  
**Compartment syndrome, Contamination.**
3. What's the tt for this complication?  
**Escharotomy, Anti tetanic vaccine.**

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71

(100)

4. Explain the pathophysiology of burns in the following:

1) Burn shock:

**Excessive leakage of plasma → systemic hypo-proteinemia & inflammatory mediators → hypovolemia, hypo-proteinemia, hypo-perfusion.**

2) Curling's ulcer:

**Severe burns → reduced plasma volume leads to ischemia & cell necrosis (sloughing) of the gastric mucosa.**

## Burned pt.



1. Mention 2 life-saving procedures in this pt.  
**Intubation and hyperbaric oxygen 100%**
2. Mention 2 indications of surgery.  
**Internal Bleeding? circumferential burn?**
3. What's the surface area of the head in children?

## A leg with pigmentation & without ulceration.

1. Identify what you see.

**Lipodermatosclerosis.**

2. What causes it?

**Inflammation of the layer of fat under the epidermis (usually due to underlying venous disease, such as venous incompetence, venous HTN).**

3. Mention 2 possible complications of this condition?

**Ulceration & Fat necrosis.**



A 50YO man with an ulcer on the lower aspect of the  
Right leg.

He was known to have DVT & varicose veins.



1. What's the type of this ulcer? **Venous Ulcers.**
2. Mention 2 physical signs that support your Dx.  
**Slopping edges, Venous lipodermatosclerosis,  
Found in gutter area.**
3. What's the underlying pathology?  
**Improper functioning of venous valves (venous  
insufficiency).**
4. Mention 2 complications of this condition.  
**Cellulitis, Gangrene, Amputation.**
5. Mention 2 non invasive investigation.  
**ABPI, Doppler US.**

A 69YO man complains of cramping pain in Rt. calf on walking 150 meters. It's worse on inclined planes & is quickly relieved by rest. Then reproduced after walking same distance. No Hx. of trauma or previous surgery.



1. What's the Dx?
2. Give 2 possible risk factors.
3. Mention one non-invasive investigation.
4. Mention one invasive investigation & what's the benefit of using it?

## Answers

1. Intermittent claudication.
2. Hyper-lipidemia, DM.
3. Doppler US.
4. Angiography (Diagnostic & Therapeutic).

A 70 YO male, presented with gangrene of his 4<sup>th</sup> toe & strong dorsalis pedis pulse (figure of the left foot with area of redness taking the shape of the patient's shoe & the other area was pale. There were many arrows).

1. Describe what you see at A.

**A: was an arrow to the 4<sup>nd</sup> gangrenous toe!**

2. What structure do you find at B?

**Dorsalis pedis artery or extensor hallucis longus tendon.**

3. What does C line indicate?

**Arrow was at the junction between red & pale area (Line of demarcation!).**

4. What's D? **Doppler US instrument.**

5. If you found strong pulse at the dorsalis pedis artery, what's the most probable cause for this finding? **DM (diabetic neuropathy).**

**Lt foot of this pt has toe deformity.**

1. Mention 2 signs you can find in this pt during examining him.

**Absent or decreased pulses, delayed capillary refill, muscle wasting.**

2. Mention 2 things this pt might complain of.

**Rest pain, Intermittent claudication.**

3. Mention one bedside clinical examination you want to do for this pt. **ABPI**



4. Describe the abnormality in Rt foot.  
**Gangrene of the Rt, big & 2<sup>nd</sup> toes.**
  
5. Give one non-invasive Investigation.  
**Hand-held Doppler.**
  
6. Give one radiological investigation. **Angiogram.**
  
7. Give one cause for this.  
**Large art. obliteration (atherosclerosis, embolism),  
Small art. obliteration (DM, scleroderma, ...).**

The pt was admitted to the hospital for 34 days, to deal with a neurological problem.



1. What type of ulcers is this?

**Neuropathic ulcer, or pressure ulcer (but not ischemic ulcer).**

2. Mention 2 conditions that may be associated with this ulcer.

**Peripheral nerve lesions (DM, leprosy, nerve injuries),  
Spinal cord lesions (spina bifida, tabes dorsalis,  
syringomyelia).**

3. Name one other site for this lesion to occur.

**Base of 1<sup>st</sup> or 5<sup>th</sup> metatarsal, Malleoli.**

4. Give Other 2 types of ulcers that you know.

**Ischemic, Venous.**

5. What's the expected ABPI?

**between 0.9-1.1 (the idea that it's not an ischemic ulcer).**

For the following pic., describe:

1. Location.  
**Rt. Sole (in the middle, more towards lateral border).**
2. Edge.  
**Punched-out & hyperkeratotic.**
3. Surrounding tissue.  
**Healthy and has a good circulation**
4. What abnormality that could be seen in toes of this pt?  
**Charcot's Joint (not sure!).**



Diabetic pt complains of leg pain.



- Mention 3 signs from the Rt. Foot.  
Swelling, reddness, tenderness
- Mention one non-invasive investigation.  
Foot x-ray
- What's the treatment?  
Immobilization and decrease weight bearing on the affected foot by casting.
- Why is the pain (pathophysiology)?! Inflammation?



1. What's this? **Epigastric Hernia.**
2. Give 2 DDx. **Epigastric hernia, lipoma.**
3. What's the reason?  
**Weakness of linea alba or abdominal wall muscles.**
4. Give 2 possible physical signs on examination.  
**Expansile cough impulse, Reducibility.**
5. What's the tt? **Hernioplasty (with mesh repair).**



1. What's your Dx? **Umbilical Hernia.**
2. What's the cause of this condition?

**The umbilical scar fails to form or is weak. The abdominal contents bulge through the weak spot & Evert the umbilicus.**

3. When we should interfere surgically?  
**If there's still a defect at the age of 4.**
4. What's the tt? **Herniotomy.**

Pt with gastric cancer came with this pic.



1. What's this? **Umbilical Hernia.**
2. What are the causes?

**In adults, it's usually secondary to increased intra-abdominal pressure (pregnancy, ascites "such as in this case; as a complication of gastric CA").**

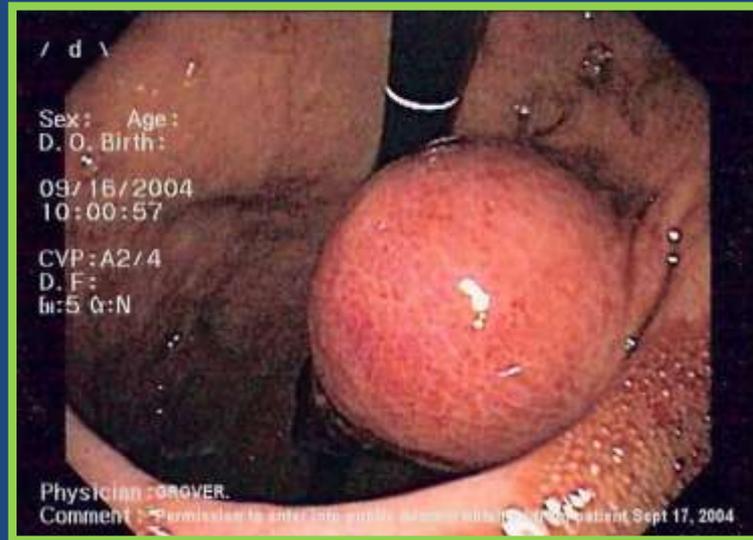


1. What's your Dx?  
**Rt inguinal swelling, not reaching scrotum.**
2. What's the relation of this hernia to the internal ring?  
**Hernial mass is Medial to the internal ring.**
3. What's the most serious complication? **Strangulation.**
4. Give 2 surgical procedures for this problem.  
**Herniorrhaphy, Hernioplasty.**



1. Describe the abnormality in shape of the umbilicus of this 35 YO female. **Crescent shape, semi-lunar.**
2. What is the Dx? **Para-umbilical hernia.**
3. What is/are most likely contents? **Omentum.**
4. Mention 2 possible complications.
  1. **Obstruction.**
  2. **Strangulation / incarceration.**

## This is upper endoscopy.



1. What's your Dx.? **GIST, or Leiomyoma.**
2. Mention 2 signs of malignant conversion in this type of tumors. **Mitotic figures, Size > 5cm.**
3. What's the most common site of this tumor?  
**Stomach.**
4. What's the tt?  
**Resect with -ve margin +/- chemo (Imatinib).**



1. Identify this organ. **Spleen.**
2. Mention 3 findings in the examination of this organ. **Can't go above it, Notch, Not ballotable, moves with respiration.**
3. What's the hematological problem that is cured by its excision? **Hereditary Spherocytosis.**
4. Name one organ that could be mistaken with it? **Left Kidney.**



عندمَا تُحِبُّ لِأَخِيكَ مَا تُحِبُّ لِنَفْسِكَ  
و تَعْطِي الْأَخْرَيْنِ بِقَدْرِ مَا تَتَمَنَّى أَنْ يُعْطَى لَكَ  
أَمْرٌ لَا رَبِّبَ فِيهِ أَنْ تَكُونَ حَيَاتِكَ مِثْلَمَا تُحِبُّ وَأَكْثَرَ  
@Bashayr\_ki

A 65 YO smoker for 20 yrs, his CT shows the following peripheral 1cm solid nodule.



1. Give the best radiological investigation for this t to be done. **PET scan.**
2. Give 2 DDx for such a case.  
**Adenocarcinoma, Carcinoid tumor, Granuloma.**
3. Give 2 modalities for taking biopsy.  
**CT-guided aspiration, VATS, Open biopsy.**

## An IVU.



1. What's the condition? **Ectopic Kidney!**
2. What's the presentation? **UTI, abdominal pain or lump.**
3. What are possible complications? **Urine Stasis (UTI, Stones), VUR & kidney failure.**
4. What do you advice pt to do?

## Hx of recurrent loin pain.



1. Give one indication for the tube. **Relieve obstruction.**
2. What's the Dx? **Uretric colic.**
3. Give 3 modalities for tt.

**ESWL, percutaneous nephrolithotripsy, Open,  
Uretroscope Lithotripsy,**

Spot Dx. >> Syndactyly.  
Fusion of middle & ring finger



Hx of pt with hemothorax presented one week later on with fever & SOB.

1. What's the Dx?

**Lt. Pleural Empyema.**

2. Mention 2 biochemical tests on pleural fluid to confirm the Dx?

**Gram stain & culture, pH, LDH, Protein.**

3. Mention 2 lines of management?

**Pleural fluid drainage, Antibiotics.**



# Empyema-CT.



A pt with long Hx. of bleeding & diarrhea since 4 yrs.

1. What's the Dx?

**Toxic Mega-colon.**

2. If you know that this pt needed urgent surgery, what's the cause of his symptoms? **IBD (Ulcerative Colitis).**

3. Mention 3 indications of surgery in this pt.

**Toxic megacolon, massive bleeding, CA prophylaxis.**



## An X-ray of barium swallow Showing Large Intestine.



1. What's your Dx.? **Colonic Diverticulosis.**
2. Mention one risk factor for this condition.  
**Constipation, Increased age, low-fiber diet, Connective tissue disorders.**
3. Mention the most Serious Complication. **Diverticulitis.**
4. Mention a non invasive modality of tt.  
**High-fiber diet, Laxatives, ...**

A child presented with inguinal lump. On examination it was lateral & lower to pubic tubercle.

1. Give the boundaries of this lump. **Inguinal ligament anteriorly, pectineal ligament posteriorly, lacunar ligament medially, & femoral vein laterally. (Femoral Hernia).**
2. What's the sign on X-ray & why? **Dilated bowel loops because of Intestinal Obstruction due to strangulation.**
3. What's your initial tt? **NPO, IVF, & then Surgery.**





1. What's the name of this investigation? **MCUG.**
2. Give One indication in children. **Recurrent UTIs.**
3. Give One indication in adults. **Stress Incontinence.**
4. What's the problem associated with this? **Reflux & bilaterally dilated & tortuous ureters.**

5. Is it more common in male or female? **Females.**
6. If this is for a female child; What's your Dx? **VUR.**
7. What's the presentation of this disease? **Recurrent UTI, Pyelonephritis, Dysurea, Frequent urination ...**
8. What are the types of this disease?
  1. **Grade I (reflux into non-dilated ureter).**
  2. **Grade II (reflux into renal pelvis & calyces without dilatation).**
  3. **Grade III (mild/moderate dilatation of ureter, renal pelvis & calyces with minimal blunting of fornices).**
  4. **Grade IV (dilation of renal pelvis & calyces with moderate ureteral tortuosity).**
  5. **Grade V (gross dilatation of ureter, pelvis & calyces; ureteral tortuosity; loss of papillary impressions).**

## DMSA scan



1. What you can see?

**Filling defect at the upper pole of the Lt. kidney.**

2. Give causes.

**Renal scar (post-pyelonephritis), renal masses, vasculitis ...**

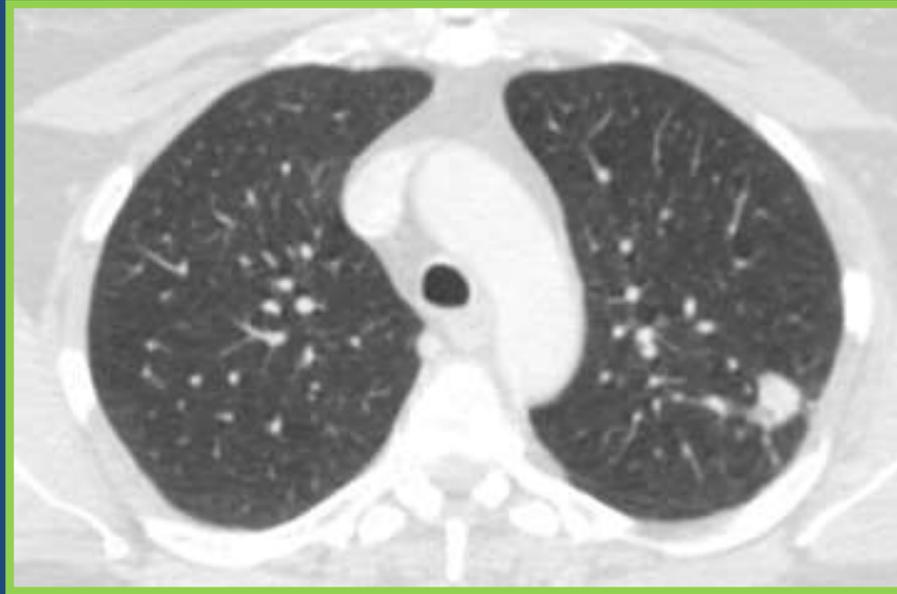
Hx of pt after RTA , hypotensive with abdominal pain & shoulder tip pain .

Q.  
99



(135)

1. What's the Dx? **Splenic trauma/rupture (not sure!).**
2. Give 2 other tests that to assess the pt.  
**Abdominal US, Diagnostic peritoneal lavage (DPL).**
3. What's the most common cause of death after surgery?  
**Sepsis (due to encapsulated organisms).**
4. What should the pt do all through his life.  
**Prophylactic penicillin for all minor infections/illnesses & immediate medical care if febrile illness develops.**



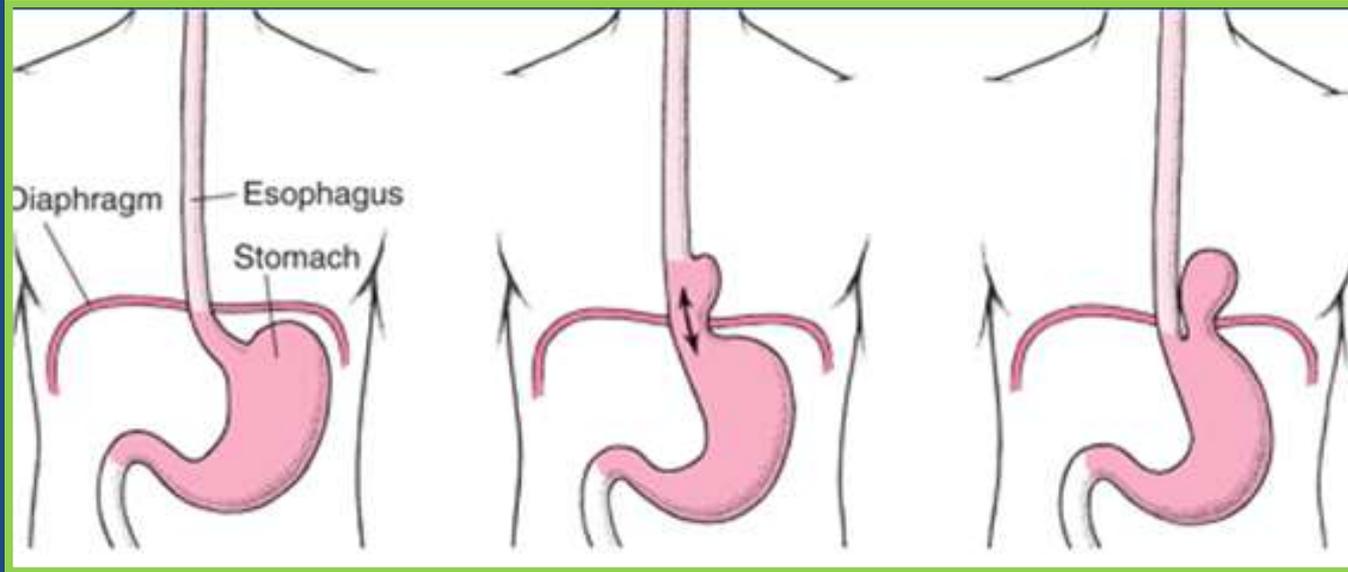
1. Give DDx.
2. What's the management? **VATS.**
3. How you can evaluate the pt before surgery? **PFT (FERV<sub>1</sub>, DLCO).**

## Solitary pulmonary nodule less than 3 cm.



1. Give 2 signs of malignancy that you can see.
2. What's the next diagnostic step?
3. What's the type of tt if pt is fit & lesion is localized?
4. What's the type of tt if there are distant metastasis?

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1



1. What's B, & C?  
**B. Sliding Hiatus hernia.**  
**C. Para-esophageal Hiatus hernia.**
2. Which one is more common? **B**
3. Which one mostly needs surgery? **C (not sure!)**
4. Which one associated with acute complication? **C**



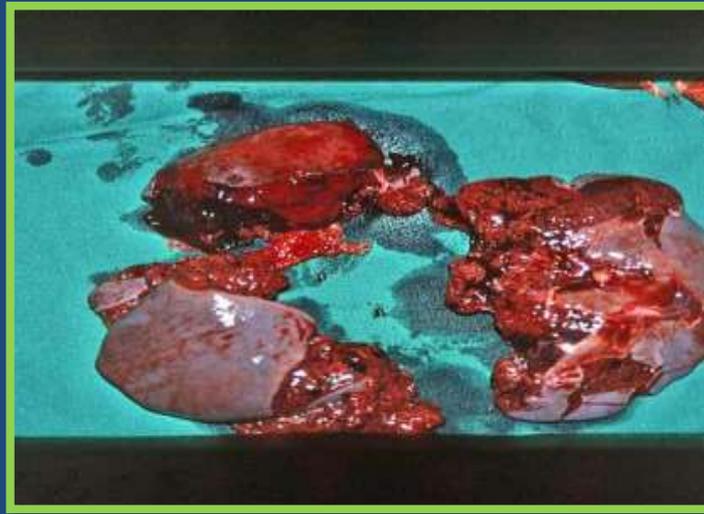
1. What's this? **Ileostomy.**
2. What's the type of this? **Brooke Ileostomy** (ileostomy folded over itself to provide clearance from skin).
3. Give one long term complication.  
**Hernia, Infection, Obstruction, ...**

Pt underwent cystectomy due to malignancy & ureterostomy was done. Pt comes with colicky abdominal pain .



1. What's the cause of this swelling?  
**It is mostly para-stomal hernia.**
2. What's the cause of the colicky abdominal pain?  
**Maybe intestinal obstruction or uretric obstruction.**
3. Mention 3 complication for ureterostomy.  
**Oozing, Bleeding, Infection.**

كلما كبر الله في قلبك ..  
كلما صغر كل شيء



1. What's the gold standard inv. of splenic trauma in stable pt? **Abdominal CT.**
2. What's the gold standard inv. of splenic trauma in unstable pt? **DPL or FAST exam.**
3. What's the most serious complication of splenectomy? **OPSS.**
4. What cause it? & How to prevent it? **Increased susceptibility to encapsulated organisms, prevented by pre-op. vaccination for pneumococcus, meningococcus & HI.**



1. What's your Dx? **Acute Appendicitis (swollen appendix).**
2. What's the name of score for Dx? **Alvarado Score.**
3. What are the 2 most important elements of the score? **RIF tenderness, Leukocytosis.**
4. Give 4 complications. **Rupture, peritonitis & septicemia, Surgery Cx. (bleeding, wound infection, ...).**
5. What's the most serious long term intra-peritoneal complication of appendectomy? **Adhesions.**

One month old FT baby, product of NVD presented with projectile, non bilious vomiting of 7 days, on examination he was moderately dehydrated.

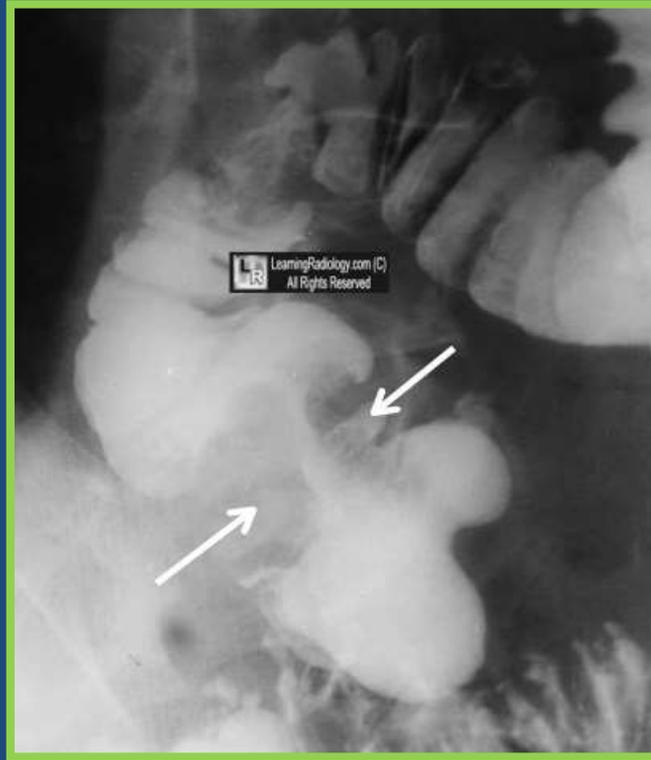


1. What's the most probable Dx?  
**Infantile hypertrophic pyloric stenosis.**
2. What do you expect to see on abdomen inspection?  
**Upper abdominal distension with visible wavy movement from Lt to Rt.**
3. What do you expect to feel on palpating the epigastrium? **Olive-shaped mass.**
4. What's the electrolyte abnormality? **Hypokalemic hypochlorimic metabolic alkalosis.**
5. If you are in doubt, mention 2 reliable investigations.  
**US, Ba Meal.**
6. What's the tt?  
**Pyloromyotomy (Ramsted's operation) after correcting the fluid & electrolyte balance.**

## A picture of opened sigmoid.

1. Describe what do you see.  
**Fungating mass or stenotic mass.**
2. How do you expect this pt was presented?  
**Bleeding per rectum, intestinal obstruction, changes in bowel habit ... (anemia is a wrong answer).**
3. What's the Dx? **Sigmoid CA.**
4. Name one biochemistry test to follow up this pt.  
**CEA.**

Chief complaint is constipation.



1. What's your Dx.? **Colon CA.**
2. Give 4 complication.

**Intestinal obstruction, Anemia, Abdominal discomfort, Metastasis (to liver, ...).**

## CT for abdomen with enlarged kidney.

1. What's your Dx.? **Renal cell carcinoma (RCC).**
2. What's the most common presentation?  
**Painless haematuria.**

**Pic for jaundice & on examination there was palpable gallbladder.**

1. Give 2 DDx.  
**Pancreatic CA, Cholangiocarcinoma, Acalculus cholecystitis (also it'll be tender).**
2. Give 2 radiological investigations? **US & CT.**

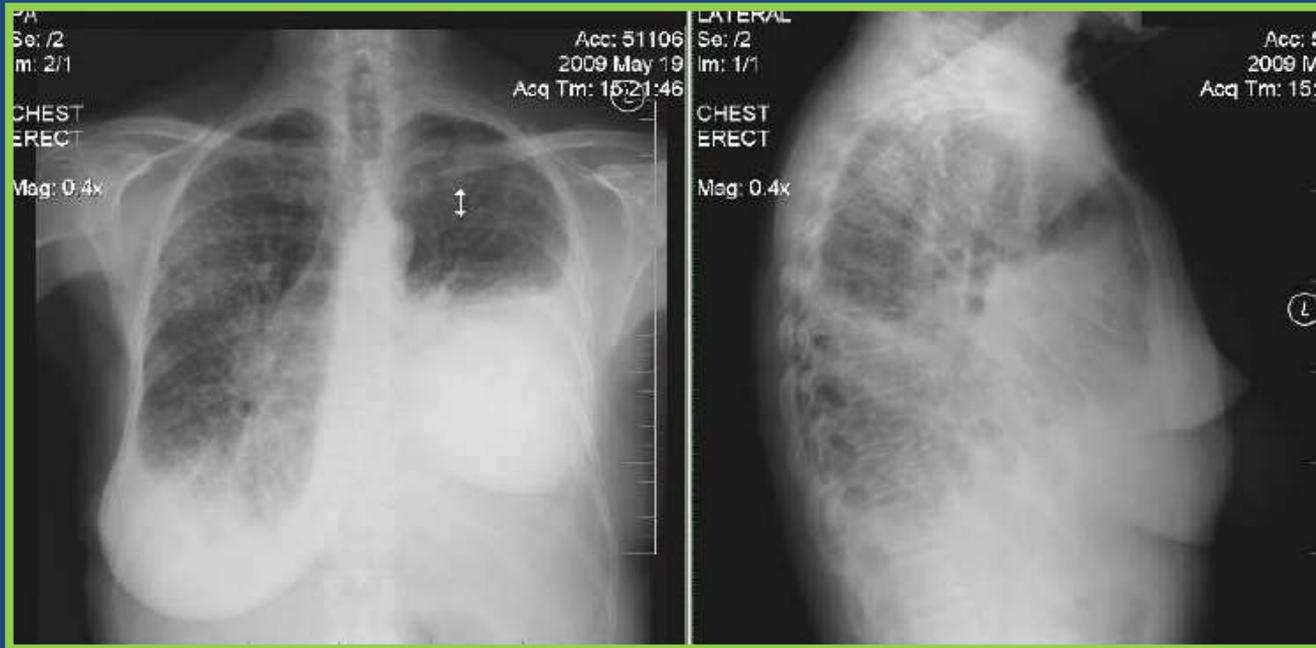
## Plain abdominal X-ray; supine.

1. What's your Dx.? **Small Bowel Obstruction.**
2. How do u know? **Central, Vulvuls Contanales.**
3. Give one complication. **Bowel ischemia & perforation.**

## CXR & Hx of surgery in joints. Pt started to complain of intestinal obstruction.

1. What's your Dx? **Paralytic ileus.**
2. Mention 4 causes.  
**Hypokalemia, DM, Infection, drugs or ischemia.**

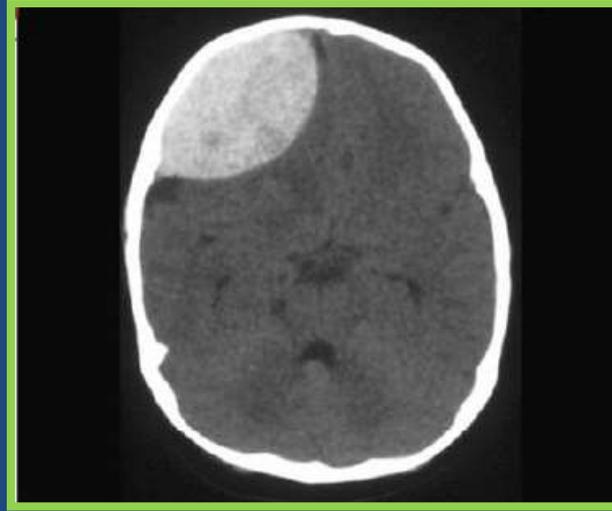
# Breast CA pt with central breast mass in advanced case on CT, presented with dyspnea & cough.



1. What's the finding in this CXR? **Lt. pleural effusion (chylothorax mostly).**
2. Name 2 other investigations to confirm Dx. **Non-invasive: Chest CT/Thoracic US. Invasive: Chest tube/Video assisted thoracoscopic surgery (VATS)/Thoracentesis.**
3. What's the tt? **Chest tube.**

Q.  
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2

# Brain CT for pt who presented with tachycardia & Tachypnea.



1. What's your DX? **Epidural hematoma.**
2. What's the cause of the bleeding? **Middle meningeal art.**
3. What's the cause of his abnormal vital signs?  
**Hypovolemia.**
4. Name 2 modalities of tt.

**Craniotomy & drainage, Managing the increased ICP (elevation of pt's & bed's head, Mannitol, ... ).**

Q.  
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3

(152)

A pt with severe peritonitis, surgery was done for Lt. sided Diverticulosis. Pt can't be fed orally.

1. Name 2 modalities of fluid recommended.  
**Normal Saline, Glucose water.**
2. Name 2 ways the fluid can be given.  
**Enteral & Parenteral.**
3. Which is better & why? **Parenteral, to rest the bowel.**

Q.  
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4



1. What's your Dx? **Splenic Laceration.**
2. What's the most serious complication? **Hemorrhage.**
3. What's the tt?  
**ICU admission, frequent US or CT, Splenectomy.**
4. What's the post-discharge follow up?  
**Pneumococcal + influenza B vaccination.**

# Hydrocele



## \* Pathophysiology:

**Primary: Patent Processus vaginalis .**

**Secondary: Infection (possible causing lymphatic obstruction),  
Tumor, Trauma.**

# Testicular Cyst



Q.  
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1  
7

(156)

### Type Three of shock:

- How much blood loss? 1500-2000 ml.
- Pulse rate? 120-140.
- Blood pressure? Decreased.
- Respiratory rate? 30-40.

## Stomal bag



- Indications: **collection of waste from a surgically diverted biological system (colon, ileum, urinary).**
- Complications: **Skin irritation , infection, hernia, ...**
- Is it for small intestine or for large intestine?!

1. Name the 3 components of the hepatic pedicle & their locations . **CBD, Portal Vein, Common Hepatic Art.**
2. What's the most common micro-organism in biliary sepsis? **E.coli.**
3. What's the most sensitive diagnostic test for GBS. **US.**
4. Chest tube indications: **Pneumothorax, Pleural effusion (hemothorax, chylothorax, hydrothorax, empyema).**
5. Chest tube complications: **During insertion (hemorrhage, infection, re-expansion pulmonary edema), Injury to surrounding structures (liver, spleen ... ), chest tube Clogging.**

6. Mention the cells that share in wound healing in the order of their migration. (4 cells)

**Neutrophils, Macrophages, Lymphocytes, Fibroblasts & myo-fibroblasts.**

7. Which cell is responsible for wound contracture?

**Myo-Fibroblasts.**

8. Adults with intestinal obstruction >> **volvulus.**

9. Child with intestinal obstruction >> **intussusception.**

A 53 YO man started to complain from recurrent vomiting of undigested food, non-biliary stained, for the past 3 months, associated with weight loss.  
With a pic. Of upper GI study.

1. What's your Dx? **Gastric outlet obstruction.**
2. Mention 2 physical findings.  
**Succession splash, Visible peristalsis, wasting & dehydration.**
3. Mention 2 causes for his disease.  
**PUD, Gastric CA, Pancreatic pseudo-cyst, ...**

An abdomen CT was done for a 43YO female. A mass with multiple areas of hemorrhage was found, she has no cirrhosis or splenomegaly caused by this disease.

1. What's your Dx? **Hepatic Adenoma (not sure!)**
2. Mention 2 clinical presentations.  
**Abdominal pain, Intra-peritoneal bleeding**
3. What's the causative agent in this case?  
**Longstanding use of OCP's.**
4. What tumor marker you expect it to rise? **AFP.**

## A CXR for a 50YO male, heavy smoker, with a lung nodule.

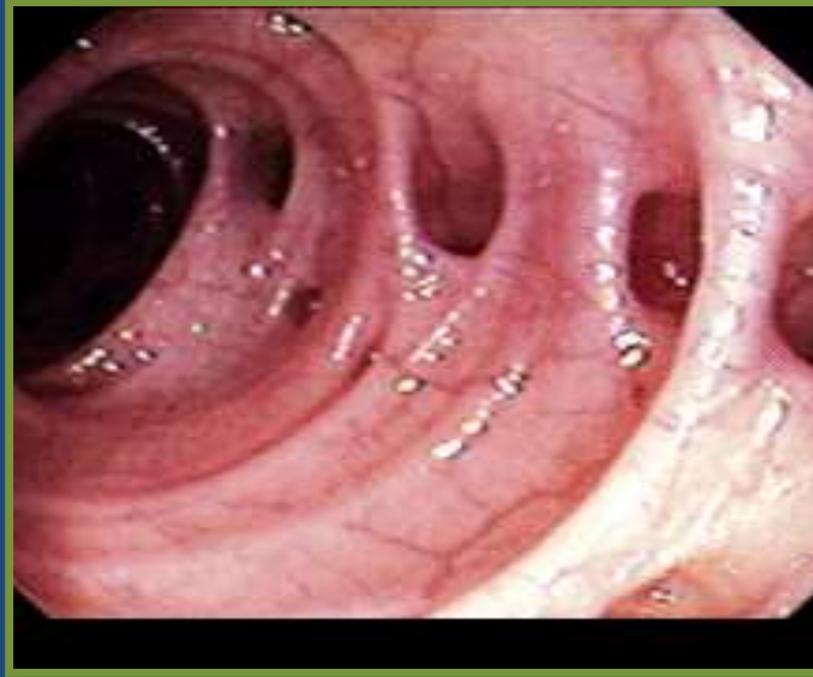
1. What's the most important radiological test you are going to do next? **Chest CT or PET-CT.**
2. If the mass is central, what's the best way to get a biopsy? **Bronchoscopy.**
3. If this mass is malignant, what you expect its type? **Squamous Cell Carcinoma (SCC).**
4. What are the 2 most important parameters in PFT? **FEV<sub>1</sub>, DLCO.**

Q.  
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## A pt with Penetrating Neck Injury.



1. What is “Zone II” in Neck injuries? **between cricoid cartilage & the angle of mandible.**
2. Mention 2 radiological investigations for this case? **CT, cervical x-ray.**
3. Give 2 indications for immediate operative exploration. **Massive haemorrhage (large vessel injury), suffocation, tracheal injury, hemodynamic instability.**



1. What's this investigation? **Colonoscopy.**
2. What's your most likely Dx.? **Diverticulosis.**
3. Mention 2 acute presentations.  
**Infection (diverticulitis), Perforation.**
4. Mention 1 chronic complication . **Fistula formation**

## Scenario of a 65 YO pt, came to the clinic!



1. What's this investigation? **Non-enhanced CT.**
2. Describe what you see. **Mass lesion on area of Rt.Kidney.**
3. What's your most likely Dx.? **RCC.**
4. What's the most common presentation?  
**Painless hematuria.**
5. What's your tt?  
**Radical nephrectomy or nephron sparing surgery.**

## Scenario of a female pt, with this MOBILE breast mass!



1. How old do you expect her to be?!  
A) 5                      **B) 15**                      C) 50                      D) 70
2. On histology, what do you expect?  
A) C1                      **B) C2**                      C) C3                      D) C4
3. Mention 2 histological sub-types of this pathology.  
**Intra-ductal & peri-tubular fibroadenoma.**
4. Which investigation that you'll NOT do it for her?  
A) FNA                      **B) Mamography**                      C) CT                      D) US

Scenario of a post-op. pt, he did bowel resection.



1. What was the surgery he did?  
**Diversion end colostomy ( not Hartman's procedure; because this is a case of trauma).**
2. What do you see? **The stoma of the Colostomy.**
3. Mention other 2 types of stoma.  
**Loop & Double-Barrel stomas.**
4. Mention one complication. **Para-stomal herniation, Infection, Bleeding, ...**

Scenario of a pt, after RTA, Lt.-sided pneumothorax, diffuse Rt.-sided subcutaneous emphysema, no improvement after chest tube.

1. What part do you expect to be injured? **Tracheobronchial airways.**
2. What's your Dx.? **Bronchopleural fistula**
3. One investigation? **Bronchoscopy.**
4. Mention 2 steps in the tt. **Supplemental oxygen & close monitoring (O<sub>2</sub> sat., ABG, ...)**, **immediate primary repair**
4. One life-threatening Cx.? **Gas embolism.**



A picture similar to page 79 in browse (lipoma).



1. Give 2 DDx? **Lipoma, Dermoid Cyst.**
2. Mention 2 investigations to assess the invasion of the lesion to the surrounding structures.

**CT, MRI.**

3. Mention one lab investigation. **FNA Cytology.**

# A picture of Cardiopulmonary Bypass machine, & the Q.s were about 3 parts on the picture!

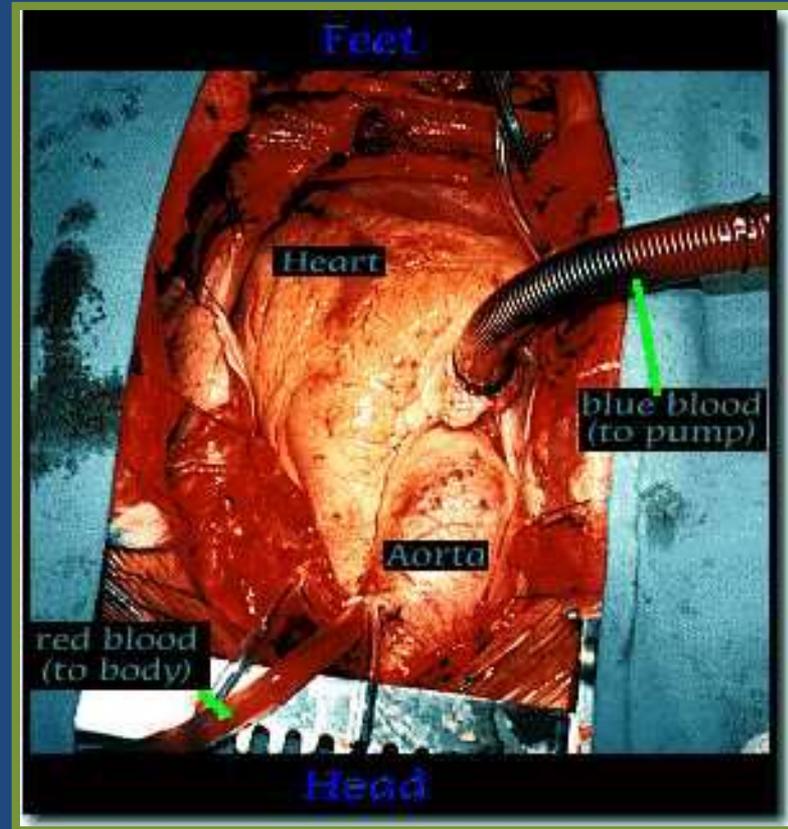
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1. Name the parts showed.

**A: right atrium , B: venous cannula & C: right ventricle.**

2. Mention 2 complications of this procedure.

**Renal failure, Pancreatitis, Electrolytes disturbances, MI.**





1. What's the Dx. **Venous Ulcer.**
2. What's the cause?

**Venous insufficiency (secondary to DVT or long standing varicose veins ).**

3. Mention 2 physical findings you see.

**Redness & Lipodermatosclerosis in the surrounding tissue, Slopping edges & granulation tissue.**

A pt with advanced gastric CA presented with this picture.

1. Give 2 DDx.

**Sister Joseph nodule,  
Umbilical hernia.**

2. How to differentiate between them?

**Cough impulse &  
Reducibility in hernia.**

3. If the intestine in this pathology was incarcerated, give 2 lines of tt.



Q.  
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(173)

A pt with Hx of anorexia, wt. loss, pale stool, dark urine, jaundice & mass in RUQ.



1. Mention 2 causes for pale stool. **Obstructive jaundice (absence of stercobilin), Steatorrhea.**
2. What's Courvoisier's law?  
**Palpable distensible non-tender gallbladder is unlikely to be due to gallstone.**
3. Mention 2 investigations. **CT, ERCP.**

Q.  
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4. What is the lowest level to detect jaundice in the sclera? **Serum total bilirubin > 2.5 mg/dL.**
5. Mention the 3 mechanisms of pathogenesis of gallbladder stones.

**When Bile is super-saturated with cholesterol;**

1. Excessive cholesterol excretion (like in obese ppl).
  2. Resection of terminal ileum (decrease bile salt & lecithin).
  3. over-absorption of water in GB during bile concentration.
6. What is the most dangerous side effect of stone in CBD? **Ascending cholangitis.**

## A 17 YO pt with acute scrotal pain.



1. What's the most important Dx? **Testicular torsion.**
2. What's the most important physical sign for this Dx? **Elevation of affected testis.**
3. If your doubts were correct, what's the most common type? **Intra-vaginal.**
4. What's the most common age of presentation? **Children & Young adults.**
5. What's the treatment? **Surgical de-torsion & bilateral fixation.**

A pt had trauma to lower lateral thoracic cage presented with this X-ray (air fluid level).

1. What's the organ most likely to be injured?  
**Spleen.**
2. Name 2 investigations if the pt is hemodynamically stable. **CT & FAST (focused assessment with sonography trauma).**
3. Name 2 complications.  
**Hypovolemic shock, Hemothorax & respiratory distress(?).**



Q.  
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Don't forget  
to smile!!!



## A pt with benign liver tumor.



1. Identify structure indicated by the arrow. **Central scarring or necrosis (?)**.
2. What's your Dx? **FNH**.
3. What's the most common **benign** liver tumor? **liver hemangioma**.
4. What's the most common primary **malignant** liver tumor? **HCC**.
5. Mention 1 curative tt for malignant liver tumor. **Surgical resection if possible (lobectomy, liver transplant)**.



1. What's the most common presentation? **Renal colic.**
2. What do u expect to find in urine analysis? **Hematuria.**
3. What's the next investigation? **Non-enhanced CT.**
4. What's the most common type of stones? **Ca+2 Oxalate.**
5. If the stone is 1 cm, what's the tt? **ESWL.**

A pt presented with Hx. of UGIB, upper & lower endoscopy were done, & were negative, Capsule endoscopy was positive, Laparotomy showed this picture.



1. What's your Dx.? **Small bowel diverticlosis.**
2. What are complications other than bleeding?  
**Inflammation & perforation, Intestinal obstruction ...**
3. Name 1 risk factor for this condition. **Low fiber diet.**
4. What's the tt? **Resection & anastomosis.**

Q.  
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{ 181 }

A 50 YO female with triple –ve breast CA presented with this picture.

1. What's the T stage for this pt?

**T4.**

2. Choose the tt:

A. Tamoxifin    B. Herceptin

**C. Taxane**    D. Aromatase inhibitor.

3. Define N2, N3.

**N2: palpable fixed axillary LN, N3: palpable supraclavicular LN or edema of the arm.**

4. If she was Mo, & cancer size is 3 cm, is she a candidate for neo-adjuvant chemo? **Yes.**



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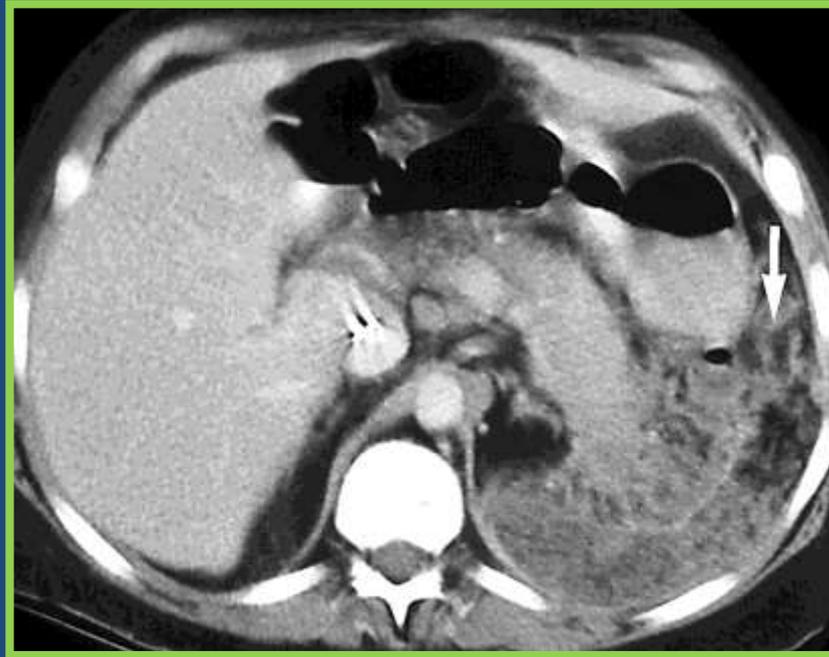
A pt presented to the ER with Lt. flank penetrating injury.



1. What are the 1<sup>st</sup> steps of management you should do to?  
**Primary Survey (ABCDE) ...**
2. If the pt is presented with dilated neck veins, mention 2 causes. **Cardiac Tamponade, Tension pneumothorax.**
3. How can you differentiate between the 2 causes in question 2 by physical exam, mention 2 points.  
**Hyper-resonant on percussion, absent breath sounds >> Pneumothorax.**

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(183)



1. What is the Dx? **Splenic infarction.**
2. Mention a systemic cause. **Systemic cause: thrombophilia, CA, embolic dis. (AF,...).**
3. Mention a cause from the spleen. **Local cause: splenomegaly (sickle cell, ...).**
4. Mention 2 lines of tt. **tt of underlying problem, adequate pain relief. Splenectomy.**



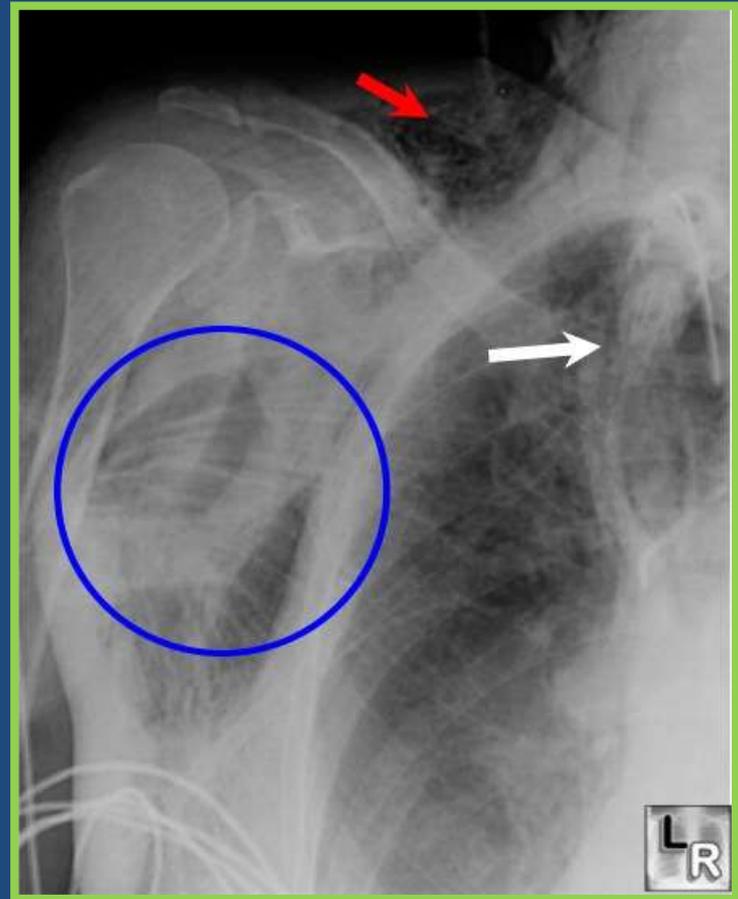
1. What is this type of stoma? **Loop stoma.**
2. Mention the 2 most common sites for it. **Ileum & sigmoid.**
3. Mention 2 early complications. **Obstruction, infection, parastomal leak.**

## A victim of RTA who was found to have surgical emphysema.

1. Name 3 possible sources of extra-anatomical air.

**Esophageal perforation,  
Tracheobronchial  
injury, external air.**

2. Is surgical emphysema per se a harmful pathology? **NO.**



Q.  
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## Elderly pt presenting with Abdominal pain & Obstipation.

1. What is the radiological sign you see? **Coffee bean sign.**
2. What is your Dx.? **Sigmoid Volvulus.**
3. What is the immediate therapeutic procedure? **Rectal tube placement for decompression & IVF correction.**
4. What is the definitive tt? **Laparotomy & surgical repair.**
5. What is risk of recurrence if he did not receive the definitive tt? **Ischemia (gangrene).**



Q.  
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A 56 year old man has had several abdominal operations in the past. He presents complaining of a discomfort associated with a small lump which has developed in the midline wound near the umbilicus.

1. What is the likely diagnosis (shown at “C”)? **Incisional hernia near the umbilicus.**

2. Mention 2 possible complications for C.

**Intestinal obstruction,  
strangulation,  
perforation.**



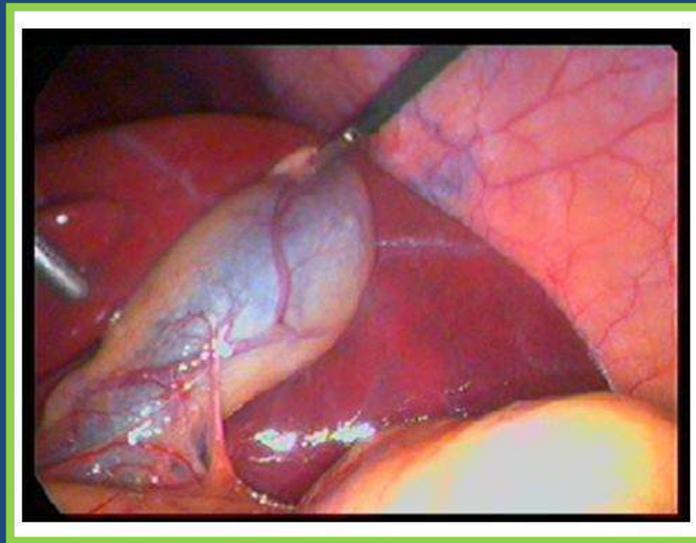
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3. What operation do you think was performed through the right upper quadrant scar? Marked “A”?  
(He says he cant remember, however it was when he was a baby.)

**A Ramstead pyloromyotomy for pyloric stenosis.**

4. With the patient lifting his head off the bed, what is marked by “B”?? **Divarication of the rectii, there has been no incision here**

This is a laparoscopic view during lap chole.



1. What are the components of Calot's triangle "hepatocystic triangle" ? **Cystic duct, cystic artery & common hepatic duct.**
2. What is the normal diameter of the CBD? **the mean diameter is 4mm, & any diameter above 10 mm is strongly suggestive of a problem.**
3. What is the 1<sup>st</sup> step in formation of cholesterol stones? **Supersaturation (followed by crystallization & stone formation).**

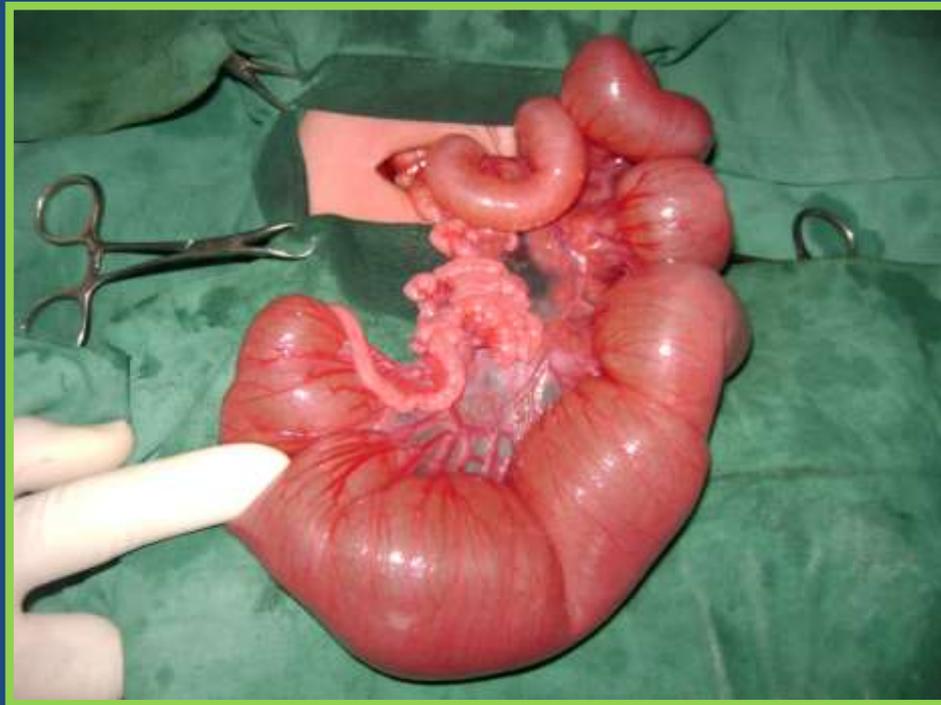
An old pt with a Hx. of abdominal surgery 2 weeks ago presented with abdominal distention & constipation.

1. Which loop of bowel is seen? **Small bowel (Jejunum).**
2. What's the most likely Dx.? **Intestinal obstruction.**
3. What's the cause? **Adhesion.**
4. Name 2 lines of tt. **NPO, NGT, IV antibiotics & prepare for surgery (laparotomy with adhesionolysis).**
5. Name 2 signs when doing x-ray. **Dilated bowel segments in supine x-ray & air-fluid level on erect x-ray.**



Q.  
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(191)



1. What's the most likely Dx? **Ileocecal atresia.**
2. What are the types?

**Type I – Membrane, Type II – Blind ends joined by fibrous cord, Type IIIa – Disconnected blind end, Type IIIb – Apple-peel deformity, Type IV – Multiple, string of sausages.**

3. what is the type in the picture? **Seems to be type I.**



1. What is this procedure? **Colonoscopy.**
2. Give 2 diagnostic values.  
**Taking biopsies, view of mucosal changes.**
3. Give 2 therapeutic uses. **Resection of polyps, reduction of intussusception through barium enema.**



1. What is this instrument? **Oropharyngeal airway.**
2. Give 2 uses. **It is indicated in unconscious pts only as it may cause gag reflex in conscious or semiconscious pts.**
3. How to insert it?

**Open the pt's mouth placing your thumb on the pt's bottom teeth & your index finger on the upper teeth, then gently pushing them apart. With the pt's mouth open as wide as possible, begin inserting the airway upside down, with the curvature toward the tongue. When the airway reaches the back of the tongue, rotate the device 180 degrees.**

تتقدم لجنة الطب البشري  
من جميع الزملاء  
والزميلات من الدفع السابقة  
بأسمى معاني الشكر  
والامنتان لجهودهم في جمع

هذه الأسئلة، فلو لا هم لم يكن

واخِرُ دَعْوَانَا اِنِ الْحَمْدُ لِلّٰهِ  
رَبِّ الْعَالَمِينَ :

