RESUMEN EXPLORACION ABDOMEN

ANTES DE EMPEZAR

Recordar las líneas, **puntos de referencia** y cuadrantes
Descubrir al paciente (desde mamilas hasta por debajo de la región inguinal) y respetar su intimidad
El enfermo en **posición correcta**: decúbito supino, piernas semiflexionadas y brazos a lo largo de cuerpo
Situarse en el **lado derecho** y **calentarse las manos** antes de tocar al paciente.
Siempre **informar** al paciente de lo que se esta haciendo **ANTES** de hacerlo.

A) INSPECCION

1. Fijarse en el **aspecto** del abdomen (plano, batracio, asimétrico, etc.) de **frente y perfil**
2. Buscar **lesiones superficiales:** cicatrices**,** bultos, lesiones dérmicas, color, vasos, ombligo, etc.

B) AUSCULTACION **MUY IMPORTANTE EN ENFERMOS OPERADOS**

3. **Calentar** el fonendoscopio
4. Auscultar los **cuatro cuadrantes**. Escuchar **mínimo 20 seg.** en cada uno

C) PALPACION **MUY DESPACIO**

5. **Calentar** las manos, se coloca la mano siempre **plana**.
6. Observar siempre **la cara del enfermo**. **NO tener prisa**, dar tiempo a que los dedos se acostumbren.
7. Se palpa **todo el abdomen en circulo** y se empieza a palpar por el lado **opuesto al dolor**
8. Tres fases: **superficial, profunda e interna.**
9. Superficial: primero se palpa la **piel**, después la **grasa**
10. Profunda: **músculo y peritoneo**
11. Interna: **vísceras**, **masas** y palpación bimanual
12. Al final tenemos que **definir: ¿hay alguna masa-megalia, hay peritonismo, hay defensa muscular?**
13. Si hay alguna **masa definir**: localización, tamaño, forma, superficial-profundo, único o múltiple, liso o irregular

D) PERCUSION

14. Sobre las **vísceras** (hígado, bazo, vejiga) nos sirve para determinar megalias
15. Sobre **resto del abdomen**, sirve para delimitar masas o determinar si hay liquido
16. Percusión con tres manos en **ascitis** importantes o abdomen en batracio
17. Percusión con el puño de la región lumbar

E) REGION INGUINAL **DESCARTAR SIEMPRE LA PRESENCIA DE HERNIAS**

18. Siempre en **bipedestación**
19. Varón: introducir el dedo por el escroto en dirección al **canal inguinal**
20. Mujer: colocar los dedos sobre la zona inguinal
21. Pedir al enfermo que **tosa** y valorar si **protuye** el peritoneo

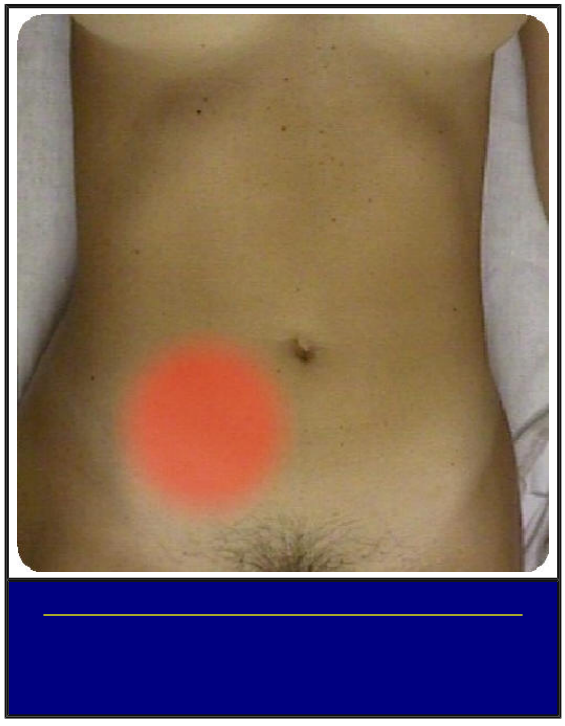
F) RECTO: Según la disponibilidad de **TIEMPO**

Search

Examination of the Abdominal Region

A. Terminal learning objective: Given a simulated patient with simulated symptoms, the student will be able to recognize potential problems and properly perform the needed exam.

B. Enabling learning objective:
   1. Identify different bowel sounds.
   2. Identify different types of hernias.
   3. Identify different organs and their position in the abdominal cavity.
   4. Identify the different symptoms of an acute abdomen.

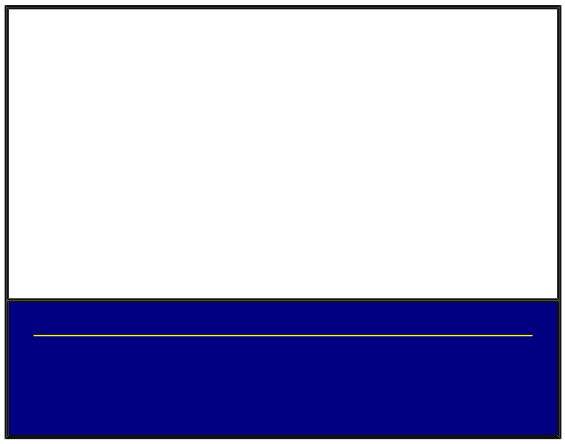


C. References:
   1. Taber's Cyclopedic Medical Dictionary, 1989
   2. The Merck Manual, Sixteenth Edition.

I. Anatomy & Physiology
   A. The abdomen is divided into 4 quandrants.
      1. RUQ: right upper quadrant
      2. LUQ: left upper quadrant
      3. RLQ: right lower quadrant
      4. LLQ: left lower quadrant
   B. Normal palpable structures:
      1. Sigmoid colon: LLQ - firm, narrow tube
      2. Cecum and ascending colon: RLQ - a softer, wider tube
      3. Pulsation's of ascending aorta: midline in upper abdomen
   C. Less commonly palpable, but normal:
      1. Liver: just below right costal margin (*Costal- To a rib)
      2. Transverse and descending colon: RUQ & LUQ
      3. Lower pole of right kidney: RUQ deep, mostly in thin women
      4. Iliac artery: pulsation's - LLQ & RLQ
      5. Spleen tip: seldom felt - LUQ under ribs

II. General principles of exam:
   A. Conditions required:
      1. Good light
      2. Relaxed patient
      3. Full exposure of abdomen
   B. Other helpful points on examination
      1. Should not have a full bladder.
      2. Supine position.
      3. Arms across chest, not above head.
      4. Ask patient where pain is, and examine last.
      5. If the patient is ticklish or frightened, initially use the patients hand under yours as you palpate. When patient calms then use your hands to palpate.
      6. 6. Watch the patient's face for discomfort.
   C. Order of exam
      1. Inspection
      2. Auscultation - always perform before palpation
      3. Percussion
      4. Palpation: light & deep

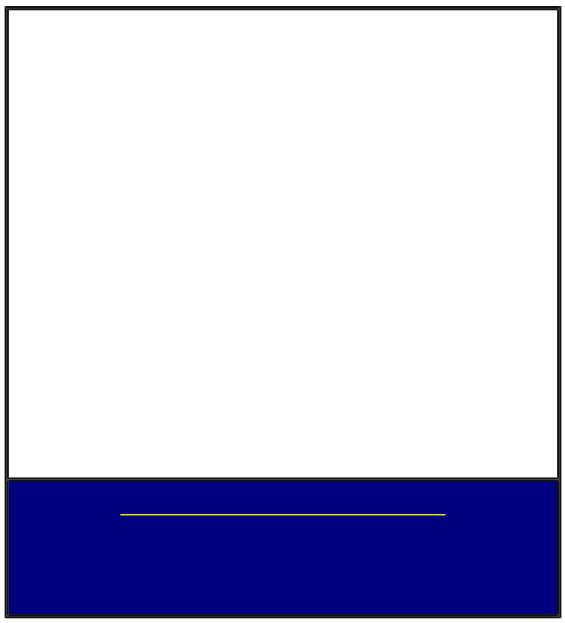
III. Inspection of the abdomen



   A. Contour: is abdomen flat, swollen or bloated? Is there an area that is bulging or moving?
   B. Skin:
      1. Strai (stretch marks): a streak or line, may be red, white, or purple. Dark pink-purple strai of Cushing disease.
      *Cushing disease: Cushing's syndrome, in which the hypersecretion of glucocorticoids is secondary to hypersecretion of adrenocorticotrophic hormone from the pituitary (Tabers Medical Dictionary, 1989).
      2. Scars: location/appearence - describe or diagram their location.
      3. Venous: dilation - seen in hepatic cirrhosis or inferior vena cava obstruction.
      4. Color: areas of discoloration or rashes.
   C. Umbilicus: contour, location, inflammation, hernia.
   D. Contour of abdomen
      1. Flat, rounded, protuberant or scaphoid.
      2. Bulging flanks - seen in ascites.
      3. Local bulges - pregnancy or distended bladder.
      4. Symmetrical - asymmetry with enlarged organs or masses.
      5. Visible organs or masses - lower abdominal masses of ovarian or uterine tumor.
   E. Peristalsis: increased peristaltic waves of intestinal obstruction.
   F. Pulsation: increased pulsation's of aortic aneurysm.
      *Aneurysm: Localized abnormal dilation of a blood vessel, usually an artery. Due to congenital defect or weakness in the wall of the vessel.
   G. Hernia:
      *Hernia: Protrusion or projection of an organ or a part of an organ through the wall of the cavity that normally contains it.

1. Abdominal - hernia through the abdominal wall.
2. Umbilical - bulging defect at umbilicus. Common in infants and generally closes by 3 y/o.
3. Incisional - defect in abdomen muscles after surgical incision. Must palpate the size of the defect.
4. Diastasis recti - not a true hernia, a separation or the two rectus abdominus muscles. No clinical significance.
5. Epigastric - small, midline protrusion through a defect in the linea alba located between the xiphoid process and umbilicus.

Auscultation of the Abdomen



0A. Bowel sounds (use diaphragm of stethoscope)
   1. Bowel sounds are widely transmitted throughout the abdomen. Listening in one spot is usually sufficient.
   2. Normal sounds are due to peristaltic activity.
      *Peristalsis: A pregressice wavelike movement that occurs involuntarily in hollow tubes of the body.
   3. Normal sounds consist of clicks and gurgles.
   4. Hypoactive bowel sounds are less than 3-4 sounds a minute.
   5. Borborygmus - is the medical term for stomach growling.
      This is due to prolonged episodes of hyperperistalsis. This is normal.

B. Abnormal bowel sounds: caused by a number of illnesses. There are several typically abnormal bowel sounds:
   1. High pitched tinkling: usually due to tension of air/fluid in a loop of dilated bowel. This suggest obstruction.
   2. Rushes: If located at one area, usually are due to air fluid being forced through small partially occluded lumen. This suggest partial obstruction, especially if associated with concurrent abdominal activity.
   3. Hyperactive: Sometimes normal if combined with abdominal complaints, can indicate early obstruction or GI bleed.
   4. Hypoactive or absent bowel sounds: Sometimes can be normal, but combined with complaints can indicate paralytic ileus (a halt in peristaltic activity due to extreme irritation from obstructive peritonitis or unknown reasons).
   5. Bowel sounds cannot be said to be absent unless they are not heard after listening for 3 minutes.

C. Systolic Bruit: An adventitious sound of venous or arterial origin heard on auscultation. Use bell of stethoscope.
   1. Listen at midline in middle of epigastrum for whooshing or blowing systolic noise indicative of turbulent blood flow from arterial plaques or aortic aneurysm. Important to listen for if patient has vascular insufficiency of the lower extremities.
   2. Listen in bilateral costovertebral angles for renal artery bruits in a hypertensive patient suggestive of renal artery stenosis.
      *stenosis: Constriction or narrowing of a pasage or orifice (Tabers Medical Dictionary, 1989).
   3. Listen over femoral areas for femoral artery bruits, in patients with lower extremity vascular insufficiency.

D. Venous Hum (rare) - epigastric/umbilical area.
    1. Soft humming noises with both systolic/diastolic component.
    2. Indicates increased collateral circulation between portal and venous systems as in hepatic cirrhosis.

E. Friction rubs (rare):
    1. Right and left upper quandrants
    2. Grating sound with respiratory movement
    3. Indicates inflammation of peritoneal surface of an organ.

F. Succession splash:
    1. Splashing sound indicative of air or fluid in body cavity with shaking individual: normal in s stomach.

V. Percussion

A. General Principles
    1. Technique as described in thorax/lungs.
    2. Percuss lightly in all quandrants.
        a. Assess areas of dullness and tympanny. Tympanny usually predominates.

B. The Liver
    1. Percuss upward in right mid-clavicular line (MCL) from below umbilicus.
    2. Ascertain lower liver border dullness.
    3. Percuss from lung resonance downward on right MCL to ascertain upper margin of liver dullness.
    4. Normally 6-12cm in right in right MCL.

C. The Spleen
    1. Searching for the small area of dullness is seldom worthwhile unless you suspect splenomegaly.
    *Splenomegaly: Enlargement of the spleen (Tabers Medical Dictionary, 1989).
    2. Percuss in the lowest interspace in the left mid-axillary line. Have the patient take a deep breath and hold. Repercuss the same area. Change from tympanic to dull indicates splenomegaly.
    3. Percuss in several directions from resonance or tympanny toward forward estimates area of splenic dullness to outline it's edges.

VI. Palpation

A. Light palpation
    1. Gentle horizontal dipping motion with finger tips.
    2. Have the patient supine with knees slightly flexed.
    3. Identify muscular resistance and abdominal wall tenderness.

B. Deep palpation
    1. Place one hand on top of the other. Press with outer hand and feel with inner hand.
    2. Palpate tender areas last.

C. Palpation of specific organs.
    1. Liver
        a. Place left hand posteriorly parallel to and supporting 11th & 12th ribs on right.
        b. Place right hand in upper quandrant well below area of liver dullness.
        c. Have the patient take deep breath and feel liver margin for smoothness, firm sharp edge, and tenderness.
        d. An obstructed distended gall bladder may form an oval mass below the edge of the liver t that merges with the liver edge.
        e. Start well below expected area of liver.
    2. Spleen
        a. Seldom palpable in normal adults. Causes include COPD, and deep inspiratory descent of the diaphragm.
        b. Support lower left rib cage with left hand while patient is supine and lift

anteriorly on the rib cage.
c. Palpate upwards toward spleen with finger tips of right hand, starting well below left costal margin.
d. Have the patient take a deep breath.
e. Palpate for spleen as it descends.
f. fA palpable spleen is almost always abnormal. Infectious mononucleosis may cause splenomegaly.
*Mononucleosis: Presence of an abnormally high number of mononuclear leukocytes in the blood (Tabers Medical Dictionary, 1989).

3. Kidney
a. Place left hand posteriorly just below the right 12th rib. Lift upwards trying to displace the right kidney anteriorly.
b. Palpate deeply with right hand on anterior abdominal wall.
c. Have the patient take a deep breath.
d. Feel for lower pole of kidney as it descends and try to capture it between your hands.
e. Have the patient release breath. Slowly release the kidney and feel it slide back into place.
f. Try the same on the left kidney, but is seldom palpable.
g. Costovertebral angle tenderness (CVA tenderness)
a. With patient seated upright, place palm of left hand over each costovertebral angle.
b. Strike back of left hand with ulnar surface of right fist.
c. Tenderness elicited suggest kidney infection such as pyelonephritis or perinephric abcess.
*pyelonephritis: Inflammation of kidney substance and pelvis.
*perinephric abcess: Absess formation in the peritoneal membrane surrounding the kidney (Tabers Medical Dictionary, 1989).

4. Inguinal/Femoral areas
a. Check bilateral inguinal areas for lymph node enlargement. Common causes include: STD, Athletes foot, bug bites and lacerations/abrasions to lower extremities.
b. Palpate for femoral pulses.
c. Check for inguinal and femoral hernias.

5. Aorta
a. Press deeply in upper abdomen slightly lateral to midline on both sides.
b. Assess width of aorta pulsations. Normal is 2.5cm in width, not including abdominal wall thickness.
c. Prominent pulsations with lateral expansion suggest an abdominal aortic aneurysm.

VII. Evaluation of Acute Abdomen/Appendicitis
A. Pain
1. Visceral (originating from the intra-abdominal organs)
a. Usually dull quality
b. Poorly localized
2. Peritoneal irritation
a. Sharp, severe, intense pain
b. Localized to specific areas
c. Coughing increases the pain
B. Signs of peritoneal irritation in acute appendicitis
1. Progression of pain
a. Begins in umbilical area

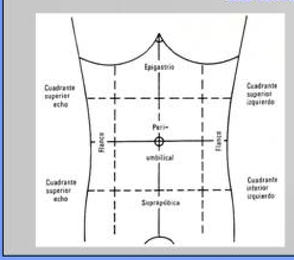
    b. Localizes in right lower quandrant
2. Guarding/muscular rigidity
    a. Voluntary guarding by tightness of muscle against palpation.
    b. b. Involuntary resistance, progressive abdominal rigidity. Patient is unable to relax muscles. Body's protective function against pain.
3. Localized tenderness - usually in RLQ or right flank pain.
4. Rectal exam reveals right sided rectal tenderness. May indicate inflammatory process other than appendicitis.
5. Rebound tenderness
6. Rovsing's sign (referred tenderness): tenderness/pain in RLQ during left sided pressure.
7. Referred rebound tenderness
8. Psoas sign: An increase in pain from passive extension of the right hip joint that stretches the iliopsoas muscle (Tabers Medical Dictionary, 1989).
9. Place right hand above right knee of the patient.
    a. Have the patient flex right knee against resistance.
    b. Alternatively, have the patient turn to side, extend right leg at right hip.
    c. Pain with maneuvers suggests irritation of Psoas muscle.
10. Obturator sign
    a. Flex patients right thigh at hip with right knee bent.
    b. Internally rotate the leg at the hip.
    c. Pain elicited suggest irritation of obturator muscle.
11. Cutaneous Hyperesthesia: Increased sensitivity to sensory stimuli, such as pain or touch.
    a. At a series of points down the abdominal wall, gently pick up skin folds between finger and thumb without pinching the skin.
    b. Localized pain elicited in the RLQ may accompany appendicitis.
12. Acute Cholecystitis: Inflammation of the gallbladder.
    a. RUQ pain and tenderness
    b. Murphy's sign: When the inflamed gallbladder is palpated by pressing the fingers under the rib cage, deep inspiration causes pain because the gallbladder is forced down to touch the fingers.
        1. Hook fingers under costal margins on the right.
        2. Have the patient take deep breath.
        3. Sharp increase in tenderness with sudden stop in inspiration is positive.
        4. Positive sign is indicative of gall bladder disease.
13. Intra-abdominal mass vs. abdominal wall mass
    a. Have the patient tighten abdominal muscles wall.
    b. Mass in abdominal wall remains palpable where as intra-abdominal mass will be obscured.

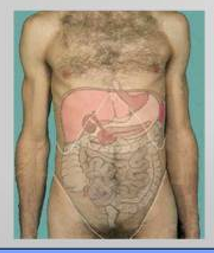
EXPLORACIÓN DEL ABDOMEN

BASES

El paciente en decúbito supino, con las piernas semiflexionadas (para relajar los músculos) y los brazos a lo largo del cuerpo.
El abdomen perfectamente descubierto, desde las mamilas hasta por debajo de la región inguinal.
Se facilita un paño para tapar al enfermo hasta el momento de la exploración.
Nunca se hace ningún examen sobre la ropa.
La habitación con la puerta cerrada y con temperatura adecuada.
El examinador en el lado derecho del paciente. Las manos tienen que estar calientes (frotarlas) así como el fonendoscopio.
Siempre informar al paciente de lo que se esta haciendo ANTES de hacerlo.

LÍNEAS DE REFERENCIA - CUADRANTES





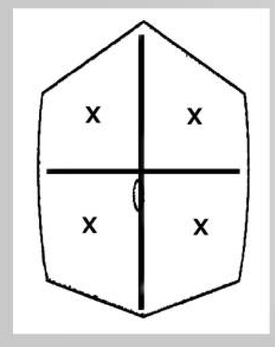
INSPECCIÓN

ASPECTO DEL ABDOMEN
(Mirar de FRENTE Y PERFIL)
Formas Tipicas: Plano, Obesidad, Batracio, Asimétrico

LESIONES SUPERFICIALES
Lesiones de Piel, Cicatrices, Color, Vasos y Ombligo

AUSCULTACIÓN

Calentar el fonendoscopio (frotando en la bata)
Auscultar los **cuatro cuadrantes** (MUY importante en enfermos operados)
NORMAL: **5-20 ruidos/min**. Escuchar **al menos 20 seg.**



TIPOS DE RUIDOS INTESTINALES

AUSENCIA DE LOS RUIDOS: o Silencio Abdominal supone no hoy ningún ruido en ningún cuadrante en por lo menos **TRES** minutos.

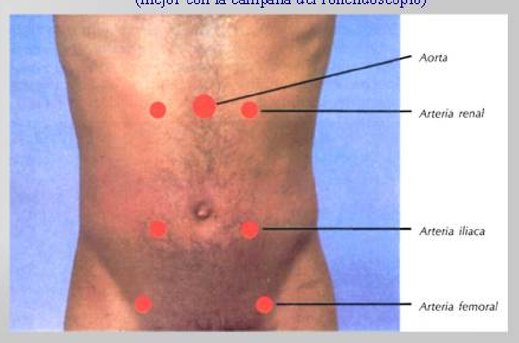
AUMENTO DE LOS RUIDOS: ruidos de sonoridad normal, pero aumentados en su frecuencia. Frecuente en enteritis, hambre y fases iniciales de la obstrucción intestinal

DISMINUCIÓN DE LOS RUIDOS: hay una disminución en el numero de ruidos que se auscultan. Frecuente en el íleo paralítico.

PERISTALTISMO DE LUCHA: es la única circunstancia en que cambia la sonoridad de los ruidos intestinales. Son de carácter metálico, con una fase de ascenso y otro de descenso, rápidos, de frecuencia variable y que en ocasiones termina en un brusco gorgoteo.

BAZUQUEO: es un ruido hidroaereo característico que se ausculta sobre el estomago y moviendo ligeramente el abdomen. Frecuente en las estenosis pilóricas y el íleo paralítico.

AUSCULTACIÓN DE SOPLOS VASCULARES
(mejor con la campana del fonendoscopio)



PALPACIÓN

NOTAS

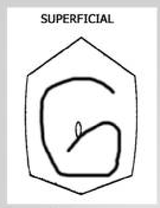
Vigilar la **temperatura de las manos**.
Durante la palpación y la percusión es muy importante **observar** el rostro del paciente.
Empezar la palpación **SIEMPRE** por la zona mas alejada a la zona dolorosa.
La palpación se hace con la **mano plana**, excepto en el ultimo paso.

OJO

Puntos dolorosos Típicos: Murphy, McBurney, Psoas
Presencia de haces abundantes en el marco colónico.

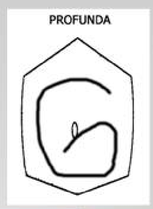
TRES FASES

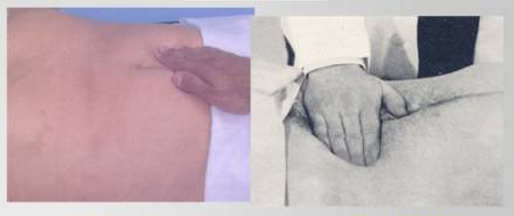
SUPERFICIAL



SOLO PIEL TCS

PROFUNDA



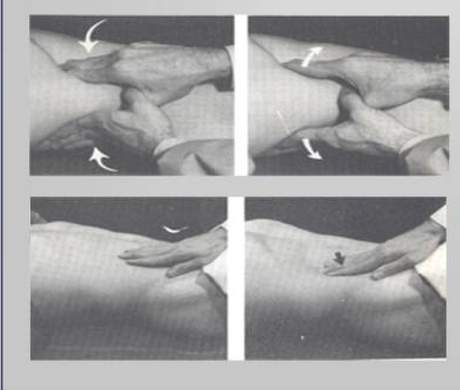


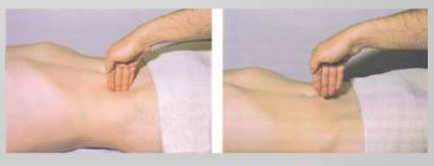
MÚSCULO PERITONEO

INTERNA

VÍSCERAS MASAS BIMANUAL ESPECIAL

OCHO PASOS

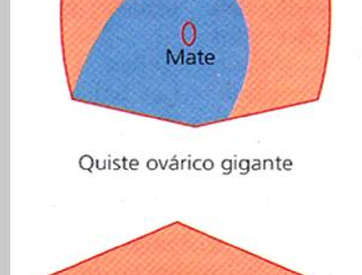




DEFINIR BULTO
Superficial o Profundo
Único o Múltiple
Tamaño, Forma
Liso o Irregular
Localización
Adherido o Libre

PERCUSIÓN

TÉCNICA

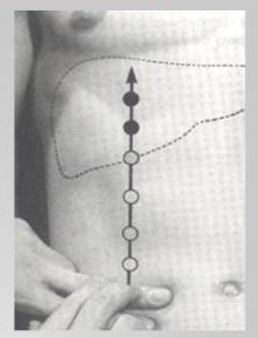


TIPOS DE SONIDOS

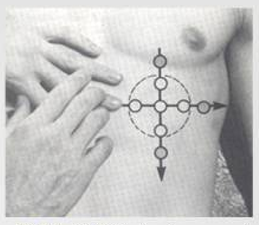
TIMPÁNICO: hipersonoro y claro originado por visceras huecas.

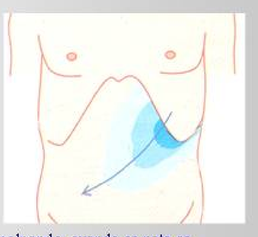
MATE: profundo, distante y grave, originado por visceras macizas.

ÁREAS DE PERCUSIÓN



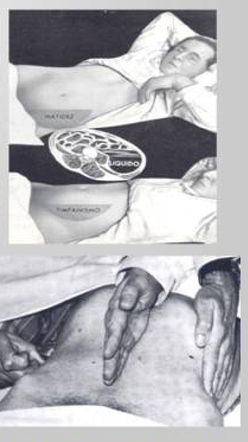
HÍGADO: origina matidez hepática. Si hay crecimiento, este es vertical. Empezar a percutir a nivel del ombligo o en el 3º espacio intercostal, línea medioclavicular





BAZO: difícil de localizar percutiendo o palpando, cuando se nota es por esplenomegalia. Crecimiento oblicuo

RIÑONES: difícil de localizar percutiendo salvo que este aumentado. Tiene mas interés saber si la puñopercusión es o no dolorosa.

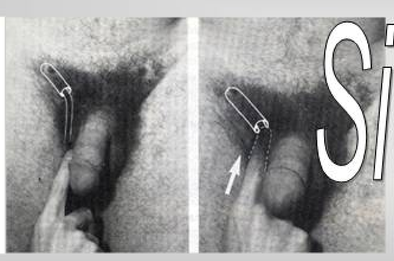


LIQUIDO LIBRE: percutir en medio del abdomen y luego cambiar de posición al enfermo. También es útil la maniobra de la oleada.

CONCLUSIÓN

DEFINIR BULTO
Superficial o Profundo
Único o Múltiple
Tamaño, Forma
Liso o Irregular
Localización
Adherido o Libre

REGION INGUINAL



Siempre en bipedestación

Maniobra de Valsalva