GI & Renal
Professional Skills
(Based on the doctor's info)

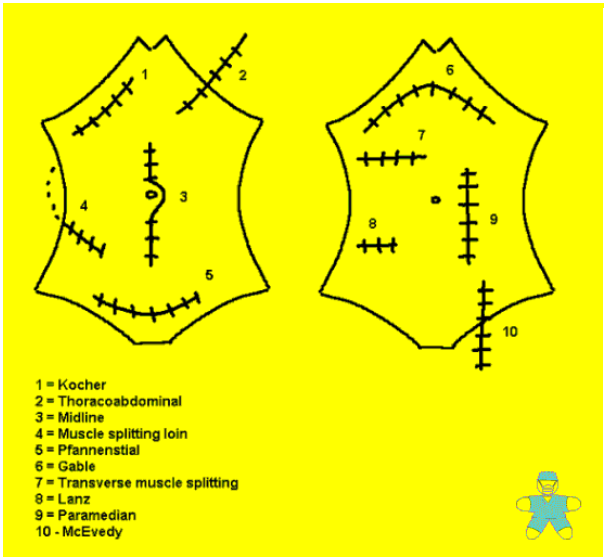
1. Greet patient, ask for permission, ensure privacy, expose the patient's abdomen (from nipple/xiphisternal joint to pubic symphysis/mid-thigh)
2. General Inspection
    a. General appearance
        i. Relaxed?
        ii. Pale?
        iii. Obese?
        iv. Ill-looking? Anorexic?
    b. Face
        i. Round/moon shape?
        ii. Cachexic?
        iii. Spider nevi
        iv. Plethora
    c. Eyes
        i. Sclera (upper part + patient look down) → jaundice (icterus)
        ii. Conjunctiva (lower part + patient look up) → anemia, hemorrhage
        iii. Xanthelesma around eyes (cholesterol)
        iv. Senile corneal arcus (cholesterol)
        v. Pupils (dilated or if irregular → in uveitis it looks fucked up)
        vi. Extra: kayser-fletcher rings in Wilson's disease
        vii. Exophthalmos
    d. Lips/Mouth/Tongue/Gums/Teeth
        i. Angular stomatitis
        ii. Chapped lips
        iii. Blue lips → central cyanosis
        iv. Glossitis → pernicious anemia, plummer vinson?
        v. Large tongue → acromegaly
        vi. Aphthous ulcers (canker sores)
        vii. Stained teeth (tetracyclines, iron supplement)
        viii. Dental caries (dental hygiene)
        ix. Hypertrophied gums (epileptic drug users)
    e. Neck
        i. Signs of goiter or visible lymph nodes
        ii. Palpate cervical lymph nodes if necessary
        iii. Check for left supraclavicular lymph node (Virchow)
    f. Hands and nails
        i. Pallor
        ii. Cyanosis (peripheral)
        iii. Clubbing (look at diamond window) 

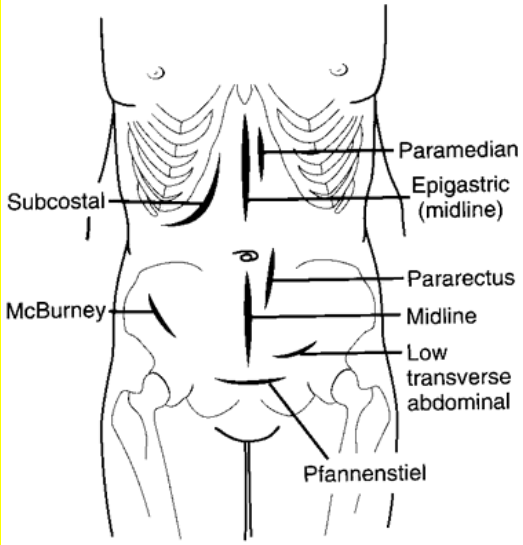
iv. Dark colored (splinter hemorrhage?)
v. Fluctuating nail bed (clubbing related)
vi. Flat nail bed
vii. Curved nail-bed? (Koilonychia in chronic iron deficiency)
viii. Leukonychia? (White nails due to hypoalbuminemia)
ix. Nicotine stained fingers?
x. Contractures (Dupuytren's contracture)
xi. FLAPPING TREMORS (for hepatic encephalopathy)

g. Arms
i. IV marks (for drug abuse, infusions, sharing needles, etc.)
ii. Tattoos

3. Ideally, you would need to do the patient's VITAL SIGNS!
a. Pulse (rate, rhythm, character, volume, condition of vessel wall)
b. Respiratory rate
c. Blood pressure (BP)
d. Temperature

4. Chest and Abdomen
a. Inspection
i. General appearance
ii. Visible masses, rashes
iii. Hair distribution (low androgens → less hair → think adrenals)
iv. Symmetrical enlargement (tumor one side, fat/preg both side)
v. Contour
vi. Scars (hernias, incisions)
1. TYPES OF INCISIONS:





vii. Rashes
viii. Umbilicus (inverted or everted or umbilical hernia)
ix. Distension (could be normal; obese, pregnancy)
x. Gynecomastia (sign of liver failure in men)

xi. Dilated veins (caput medusa in periumbilical region)
xii. Spider nevi (know this by pressing it and see if it goes away)
xiii. Striae (purple or silver/white)
xiv. Aortic pulsations
xv. Senile hyperpigmented skin
xvi. Swellings
xvii. Visible peristalsis
    1. "Tangential view" by looking from the patient's toes
    2. Or by looking from the sides

b. AUSCULTATION
    i. DO THIS BEFORE EVERYTHING ELSE
    ii. THIS IS BECAUSE IF YOU PALPATE OR DO ANYTHING YOU CAN GET EXAGGERATED SOUNDS IN THE ABDOMEN WHICH WILL AFFECT AUSCULTATION
    iii. What to auscultate for:
        1. Abdominal aorta (centrally, above umbilicus)
        2. Renal Arteries (2 fingers or 2 inches from midline at 1)
            a. Normally not audible
            b. If audible → Renal artery stenosis
        3. Liver (in abnormal conditions)
            a. Murmurs can be heard over enlarged liver
        4. Femoral arteries
            a. Normally not audible
            b. If audible → hyperdynamic circulation
            c. If audible (bruit) → Femoral artery stenosis
        5. Abdominal Sounds
            a. Place the stethoscope for more than 10 seconds
            b. Normally you hear bowel sounds (rumbling) every once in a while
            c. Abnormalities:
                i. Paralytic ileus (no sound)
                ii. Intestinal obstruction (high pitched sounds)

Remind the patient that you will touch him/her and ideally wash your hands.

c. Superficial palpation
    i. Position
        1. Hands/arms on the side
        2. Supine
        3. One pillow below head, bed not raised
        4. Raise knees → knee and hip flexion to relax abdominal muscles
    ii. Precautions
        1. Ask the patient for permission
        2. Warm your hands

3. Ask the patient if he feels pain anywhere (leave that site for last)
4. Use the PALMS of your hands
5. Make sure your hands are faced towards the medial plane (as in, parallel to the costal margins)

iii. Say the name of all 9 regions before starting your exam
1. Right and left hypochondriac, epigastric, hypogastric, left and right flanks, left and right inguinal regions

iv. ALWAYS START FROM THE RIGHT ILIAC FOSSA
1. Go clockwise from there over the 9 regions OR
2. Go anticlockwise OR
3. Go opposite to the direction of pain from there
4. Palpate 9 times in total
5. keep **DIRECT eye contact** with patient

v. What to check for:
1. Superficial organomegaly
2. Superficial rigidity (the abdomen is already hard)
3. Guarding (reflex contraction of muscle)
4. Superficial tenderness (it is a sign, look at the patient's face)

vi. Look at the patient's face and do it during respiration? Probably during inspiration

d. Testing for superficial masses vs. deep masses
i. Resistance method
1. Ask the patient to pull himself up as if he wants to sit upright
2. When he is trying to erect himself, stop him by pushing his head down
3. Ask him to keep pushing and then look at his contracted abdominal muscles
4. If the mass you are assessing withdraws (disappears) then it is a deep mass
a. Could be a very serious condition
5. If the mass you're looking at becomes more prominent (appears larger) then it a superficial mass
a. Could be a lymph node or a lipoma

e. Deep palpation
i. Press deeply or use one hand over the other hand to press
ii. Every other step is JUST LIKE SUPERFICIAL PALPATION

5. Specific (deep) palpations (use both hands all the time for each one)
i. Palpation for aortic aneurysm
1. Check for expansible pulse
2. Sides of your hands lateral to umbilicus

3. And press down to feel the pulse
4. In older adults, measure the width

ii. Palpation of the groins (I also put it down as "extras")
1. For hernias and stuff

iii. In males, palpate the scrotum (signs of hernia – extras)

iv. Palpate the liver
1. The hand on the bottom is the side you're on (percussing liver on right side, right hand bottom)
2. Bottom hand is in the costovertebral angle
3. Upper hand (left hand) palpating at right iliac fossa
4. Make sure your **HAND IS PARALLEL TO COSTAL MARGIN**
5. Ask patient to inspire and expire
    a. On inspiration palpate
    b. Move on expiration
6. Stop once you reach the right costal margins
7. If you DID feel the lower liver border, comment on:
    a. Tenderness
    b. Surface texture (smooth or nodular?)
    c. How far down is it from the costal margin)
    d. It can be palpated sometimes in children and thin people during deep inspiration
8. You may check for Murphy's sign (stopping on inspiration due to pain – cholecystitis)

v. Palpate for the spleen
1. Left hand on the bottom of left side
2. Right hand moving from right iliac fossa (or umbilicus) towards left costal margins
3. Ask patient to move to their right side
4. Palpate again from umbilicus to the left costal margin at MAL

vi. Palpate the kidney for ballottement (Bimanual technique)
1. Left hand on anterior abdominal wall at approximate location of kidney
2. Right hand on the same location but on the back
3. Push your right hand inwards and test to see if you can feel the kidney hitting your left palm
4. If you do, this is abnormal and a positive ballottement
    a. Occurs in Wilm's tumor, hydronephrosis, RCC

b. Differentiating enlarged left kidney from splenomegaly:
    i. Spleen enlarges obliquely towards umbilicus and RIF (due to the presence of phrenocolic ligament)
    ii. You cannot get your hand above the spleen
    iii. Spleen has a notch (kidney doesn't)

6.

a. Percussion (of liver, spleen, kidneys, bladder)
    i. Start at the right iliac fossa
        1. Move up until the tone changes to dull
        2. This is the lower border of the liver
    ii. Start from the right 2nd intercostal space
        1. Go down until it changes from resonant to dull
        2. This is the upper border of the liver
        3. When you find it, ask the patient to inspire and percuss again to see if it changes from dull to resonant (if so, liver)
    iii. Measure the borders of the liver (LIVER SPAN at right MCL)
        1. Use a ruler/tape measure
        2. Should be between 6 –16 cm (some say 6 – 10 cm only)
        3. Expected to be at right 5th ICS
    iv. Spleen percussion
        1. Start at the right iliac fossa
        2. Percuss obliquely through umbilicus to the left costal margin
        3. If you can feel dullness → ABNORMAL
        4. According to the handout, however, you start at the left MAL and then go to the left costal margin
    v. Other spleen percussion methods
        1. Find the lowest intercostal space on the left side (lowest rib = rib 10) at the ANTERIOR AXILLARY LINE
        2. Percuss from there upwards and downwards
        3. If you hear dullness = enlarged spleen

    vi. Bladder percussion
        1. From below the umbilicus to the pubic area
        2. Dull or not? Dull = filled
        3. Bladder fills upwards not sideways

    vii. Percuss the back for kidneys
        1. Hand on RENAL ANGLE (feel costal margins until reaching vertebral column)
        2. Other hand kind of PUNCHES the hand on the renal angle
        3. He/She shouldn't feel pain

b. Special tests for Ascites
    i. Good history taking
        1. Obvious abdominal distention or not?
        2. If yes, rule out other causes (5Fs):
            a. Fetus
            b. Feces
            c. Fat
            d. Flatulence
            e. Fluid
            f. Filthy tumor/Functional (😐)

    ii. For mild ascites, you can perform the SHIFTING DULLNESS test
        1. Percuss from xiphoid down to umbilicus
        2. Normally, tympany is heard
        3. From the umbilicus, percuss to the flanks on both sides
        4. WHEN and IF you hear it change to DULL, STOP
        5. Mark that area or put your finger on it
        6. Ask the patient to turn AWAY from you
        7. Ideally, wait 30 seconds – 1 minute
        8. Now percuss again at the point… NO LONGER DULL = POSITIVE

    iii. For GROSS ascites, perform the FLUID THRILL TEST
        1. Lay one hand flat on the left side of the abdomen
        2. Flick the right flank
        3. You feel vibration on your flat hand
        4. Now ask the patient to put their hand on the midline
        5. Flick the right flank again
        6. You still feel vibration? Then positive for ascites
        7. What is the purpose?
            a. Vibrations can travel in subcutaneous fat
            b. By placing the hand in the midline, you stop this fat transmission

7. When you're done always mention that it would be best to do the following:
    a. **Per rectal (digital) exam** → Check for prostate, blood in fingertips
    b. **Inguinal orifices** and region (for hernias)
    c. **Male external genitalia** (for indirect inguinal hernias)
    d. **Vaginal examination** (and bimanual, to check for example tumors)
    e. **Feet** (for peripheral edema – especially around pedal/pedal edema)

HISTORY TAKING

- You have to do this before physical exams
- Composed of:
    - Demographic data collection
    - Chief complaint with duration
    - History of present illness
        - Abdominal pain
            - Colicky, etc.
            - Location??
        - Epigastric pain
        - Vomiting
        - Flatulence
        - Bowel sounds
        - Diarrhea
        - Constipation
        - Hematochezia, melena
        - Urine color
        - Jaundice
        - Weight loss
        - Anorexia
        - Ascites/ edema (sign and symptom)
    - Past medical history
        - Allergies
        - Medications
        - Surgeries
    - Family History
        - Genetically inherited diseases!
    - Personal (Social) History (important)
        - Alcoholic?
        - Smoker?
        - Job and relation?
        - Social life and stress?