

Week 1 - abdominal assessment

Surface landmark

- large oval cavity extending from the diaphragm down to the brim of the pelvis
- Bordered on the back by the vertebral column and paravertebral muscles and at the sides and front by the lower rib cage and abdominal muscles
- Four layers of flat muscle form the ventral abdominal wall
- The linea alba joins the ventral abdominal wall at the midline
- Rectus abdominis forms a strip extending the length of the midline and its edge is often palpable

Internal anatomy

- solid viscera= they maintain a characteristic shape (liver, pancreas, spleen, adrenal glands, kidneys, ovaries and uterus)
- Liver is located in RUQ and extends to the left midclavicular line
- Liver and kidneys are palpable
- Hollow viscera (stomach, gallbladder, small intestine, colon and bladder)

4 quadrants

Right upper quadrant - liver - Gallbladder - Duodenum - Head of pancreas - Right kidney and adrenal - Hepatic flexure colon - Part of ascending and transverse colon	Left upper quadrant - stomach - Spleen - Left lobe of liver - Body of pancreas - Left kidney and adrenal - Splenic flexure of colon - Part of transverse colon and descending colon
Right lower quadrant - caecum - Appendix - Right ovary and tube - Right uterus - Right spermatic cord	Left lower quadrant - part of descending colon - Sigmoid colon - Left ovary and tube - Left ureter - Left ureter - Left spermatic cord
Midline - aorta - Uterus (if enlarged) - Bladder (if distended)	

development and social consideration

- infant and children
- Umbilical cord shows - 2 arteries and 1 vein
- Liver takes up a big space
- Bladder located higher than normal - lies between the symphysis and the umbilicus - Less macular so organs are easily palpated
- Pregnant woman
- Experience constipation
- Increased venous pressure in the lower pelvis - can lead to hemorrhoids
- Intestine is displaced upwards and posterior (bowel sounds are diminished)
- Appendix is displaced upwards to the right
- Stile and linea nigra
- late adulthood
- Salivation decreases- causing dry mouth and decreased sense of smell

- Oesophageal emptying is delayed - can result in fullness, dysphagia and reflux
- Acid secretion decreases with ageing - causing anaemia
- Increased gallstones
- Liver size decreases with age
- Complain of constipation - due to decreased activity, dehydration, low fibre diet,

Subjective data

- presenting concerns
- Do you feel that you have any abdominal problems
- It is important to ascertain the person's perception of their presenting health concern - How does this impact you in the quality of life
- Food intolerance
- Are there any foods you can not eat? What happens when you eat them? (allergic reaction/ heartburn/belching/abdominal pain/bloating/indigestion/diarrhea)
- Have they sought any assistance from a health professional for these symptoms
- Do you use antacids or any other medication or therapy for these symptoms? Which substances and how often?
- Abdominal pain
- Characteristic
- How would you describe the pain you are experiencing? Cramping (colic type), burning, stabbing, dull, tingling, aching?
- Onset
- Duration variation- how did it start? How long have you had it
- Location
- Where is the pain? Please point? Is it in one spot or does it move around
- Duration
- Is the pain consistent or does it come and go? Does it occur before or after meals? Does it peak? When?
- Severity
- How intense is the pain? Rate from 1-10
- Pattern:
- What makes the pain worse? (food/ movement/ stress/medication? What have you tried to relieve pain?
- Associated factors
- Is the pain associated with any other symptoms
- Nausea and vomiting
- Do you have any nausea/ vomiting? How often? How much comes out? What colour? Odour?
- Is it bloodstained
- Is it associated with any other symptom
- What food did you eat in the last 14 hours? Where? Any family with same symptoms
- Bowel function
- How often do you have a bowel movement
- What is the colour? Consistency
- Any diarrhoea or constipation
- Any recent changes in bowel habits
- Past history
- Have you ever had history of GIT problems?
- Do you have any history of UTI, kidney problems, ovarian or menstrual problems
- Have you ever had surgery on your abdomen
- Health and lifestyle management

- What prescribed medication are you on
- Are you taking any over the counter media
- Alcohol and drug use
- Smoking

Objective data

- preparation
- Person should have emptied their bowels and bladder
- Keep room warm
- Position patient on supine position
- Hamr stathescope head
- Inquire about painful areas
- Inspection - Contour -
- symmetry
- Should be symmetrically bilateral
- Ask the patient to take a deep breath to further highlight any changes
- Ask them to put their chin on their chest and raise their head- should still remain semetrical
- Umbilicus
- Midline and inverted
- No signs of discolouration, inflammation or hernia
- Skin
- Smooth surface
- Homogenous colour
- Striae
- Moles are normal
- Surgical scars - must document and highlight location and size
- auscultation
- Done before palpation because they cane increase paristasis which would five falls results
- Starts by RLQ
- Bowel sounds
- Listen until you dins them
- 3 types
- Normal
- Hyperactive
- Loud, high pitched, rushing,tinklinf sounds that signal increased motility - hypoactive/absent
- General tympani
- Dullness occurs over a distended bladder, faecal loading, adipose tide, fluid or mass - Hyper resonance- in geseous distension
- Palpation = to judge the size, location and consistence of abdominal mass or tenderness
- Bend the person's knee
- Hold your palpating hand low and parallel to the abdomen/ use finger pads not the tips
- Instruct the person to breath slowly
- Keep own voice low and soothing
- Emotive imagery (imagine you are in the beach)
- If grading tell them to wiggle their toes

What to do if mass is identifies

- document:
- location

- Size
- Shape
- Consistency
- Surface
- Mobility
- Pulsatility
- Tenderness

Week 2 - respiratory assessment

Upper airways

Position and surprise landmarks

- the thoracic cage is a bony structure with a conical shape which is narrow on the top
- It is defined by the sternum, 12 pairs of ribs and 12 thoracic vertebrae
- Its floor is the diaphragm - musculoskeletal septum that separates the thoracic cavity from the abdomen
- 1st 7 ribs attach to the sternum via their costal cartilage
- Ribs 8,9&10 attach to the costal cavity above
- Rib 11 & 12 flote
- costochondral junctions are the points at which the ribs join their cartilages (not palpable)

Anterior thoracic landmarks

- suprasternal notch: u shaped depression just above the sternum on between the clavicles - Sternum: the breastbone. Has 3 parts:
- Manubrium
- Body
- Diploid process
- Manubriosternal angle:
- Composed of the manubrium and the body of the sternum
- It marks the site of tracheal bifurcation into the right and left main bronchi
- It helps localise a respiratory finding horizontally
- To find it:
- Palpate the second rib and slide down to the second intercostal space, continue counting down the ribs in the middle of the hemithorax
- Costal angle
- The right and left costal margins form an angle where they meet at the diploid process
- When rib cage is chronically overinflated:
- Angle is increased over 90 degrees

Posterior thoracic landmarks (counting ribs and intercostal spaces is harder due to the muscle and soft tissue in the back)

- Vertebra prominens
- Flex your head and the most prominent bony spur protruding at the base of the neck
- Spinous processes
- Knobs of the vertebrae
- Inferior border of the scapula
- Located symmetrically in each hemithorax
- The lower tip is usually at the seventh or eighth rib
- Twelfth rib
- Palpate midway between the spine and the person's side to identify its free tips

Reference lines

- midclavicular line

- Bisects the cere of each clavicle at a point halfway between the palpated sternoclavicular and acromioclavicular joints
- Vertebral / mid spinal line and the scapular line
- Extends through the inferior angle of the scapular when the arms are at the side of the body
- anterior axillary:
 - From the anterior axillary fold where the pectoralis major muscle inserts
- Posterior axillary
 - From the posterior axillary fold where the latissimus dorsi muscle inserts
- Midaxillary
- Apex of the axilla and lies between and parallel to the other 2

The thoracic cavity

- Mediastinum
- Oesophagus, trachea, Heart and great vessels
- Left and right pleural cavity
- Contains the lungs

Lobes of the lungs

- right lung is shorter than left lung because of the underlying liver
- The left lung is narrower than the right because of the heart
- Right lung has 3 lobes and left lung has 2

Pleurae

- a thin slippery pleurae form an envelope between the lungs and the chest wall
- Visceral pleura:
 - It lines outside of the lungs
- Parietal pleura
 - Inside the chest wall and diaphragm

Trachea and bronchial tree

- the trachea lies anterior to the oesophagus and is 10-11cm long
- The trachea and bronchi transport gases between the environment and the lung parenchyma.
 - Goblet cells
- Secrete mucus
- Acinus:
 - Functional respiratory unit that consists of the bronchioles, alveolar ducts, alveolar sacs and the alveoli

The mechanics of ventilation and respiration

- respiration:
 - The exchange of gases across the alveoli
 - Can be divided into:
 - Oxygenation= the supply of oxygen to the body for energy production
 - Removing carbon dioxide= waste product of respiration
 - Maintaining homeostasis of arterial blood
 - Maintain heat exchange
- Ventilation:
 - 2 part process of moving air into and out of the lungs

Control of breathing

- we have involuntary control of ventilation is mediated by respiratory centre in the brainstem (pons and medulla)- they work by detecting the change in CO₂ and oxygen levels in the bloodstream

- The normal stimulus for breathing is hypercardia or hypercapnia