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CLASS ID :14077

SUBJECT : CROSS SECTIONAL ANATOMY

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DEPARTMENT : AHS

PROGRAMME : BS (RAD) 6TH SEMESTER

Q1: which structure appeare on the MRI of heart ? Name any 10 of them .

ANS: DISEASE WICH SHOWS ON CMRI

★ evaluating the anatomy and function of the heart chambers, heart valves, size of and blood flow through major vessels, and the surrounding structures such as the pericardium.

★ diagnosing a variety of cardiovascular disorders such as tumors, infections, and inflammatory conditions.

★ evaluating the effects of coronary artery disease(CAD) such as limited blood flow to the heart muscle and scarring within the heart muscle after a heart attack.

★ planning a pt's care for cardiovascular disorders.

★ monitoring the progression of certain disorders with time.

★ evaluating the effects of surgical changes, especially in patients with congenital heart disease.

★ evaluating the anatomy of the heart and blood vessels in children and adults with congenital heart disease.

STRUCTURES:

1. All ventricles.
2. Aorta

3. Both lungs
4. Arch of aorta
5. Mediastinum
6. Pulmonary arteries and pulmonary veins
7. Cardiac valves
8. Para cardiac fat
9. Chest wall
10. Stomach
11. Liver

Q2; Name the arteries that appears on performing CT abdomen .

Ans: CT abdomen:

CT of the abdomen is a diagnostic imaging test used to help detect diseases of the small bowel, colon and other internal organs and is often used to determine the cause of undetermined pain. CT scanning is fast, pain-free, noninvasive and accurate.

★ infections such as appendicitis, pyelonephritis or infected fluid collections, also known as abscesses.

★ inflammatory bowel disease such as ulcerative colitis or Crohn's disease, pancreatitis or liver cirrhosis.

★ cancers of the liver, kidneys, pancreas, ovaries and bladder as well as lymphoma.

★ kidney and bladder stones.

★ abdominal aortic aneurysms (AAA), injuries to abdominal organs such as the spleen, liver, kidneys or other internal organs in cases of trauma.

Arteries of the abdomen:

★ Abdominal aorta
★ Superior mesentric artery
★ Splenic artery
★ Hapetic artery
★ Celiac artery
★ Right renal artery
★ left renal artery

★ Hapetic artery
★ Iliec artery

Q3: Write short notes on thoracic and lumber spines ?

ANS :

T spine and cervical:

Thoracic spine:

The section of the spinal column called the thoracic spine start below the C7, neck roughly at shoulder level and continues descending until it reaches the first level of the L1, lumbar spine. Twelve vertebrae, numbered T1 through T12 from top to bottom,

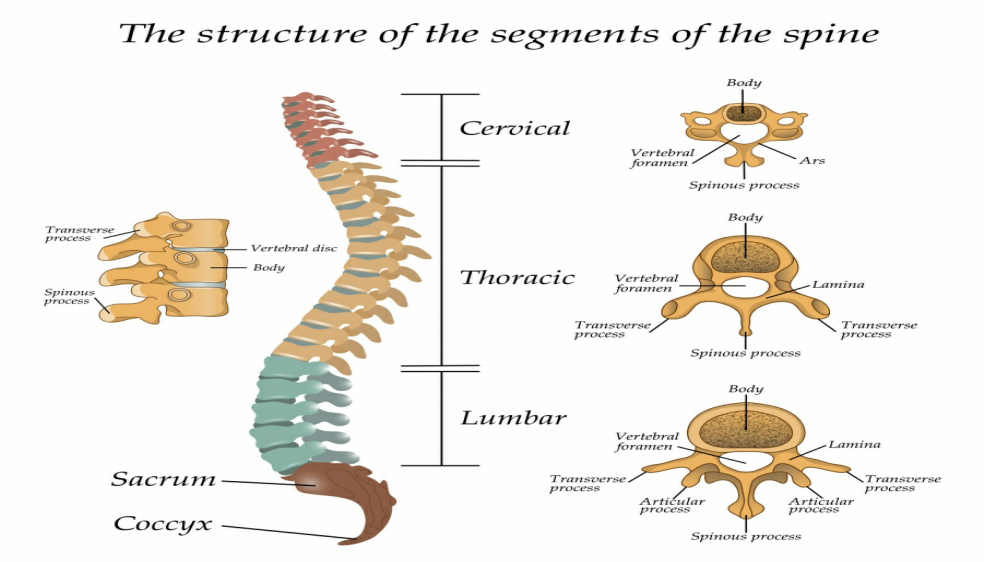
The thoracic spine helps support the body's torso and chest areas and supply an attachment point for each of the rib bones, except the 2 at the bottom of the ribcage.

Like most other spinal vertebrae, the thoracic vertebral bodies are rounded. Bony arches project from the back of each vertebral body forming a hollow protective space containing the spinal cord. Thoracic facet joints are paired at the back each vertebrae and allow limited spinal movement

DISC IN THORACIC SPINE

A fibrous pad of tissue called an inter-vertebral disc is held in point by a strong end-plate attachment btw each level's upper and lower

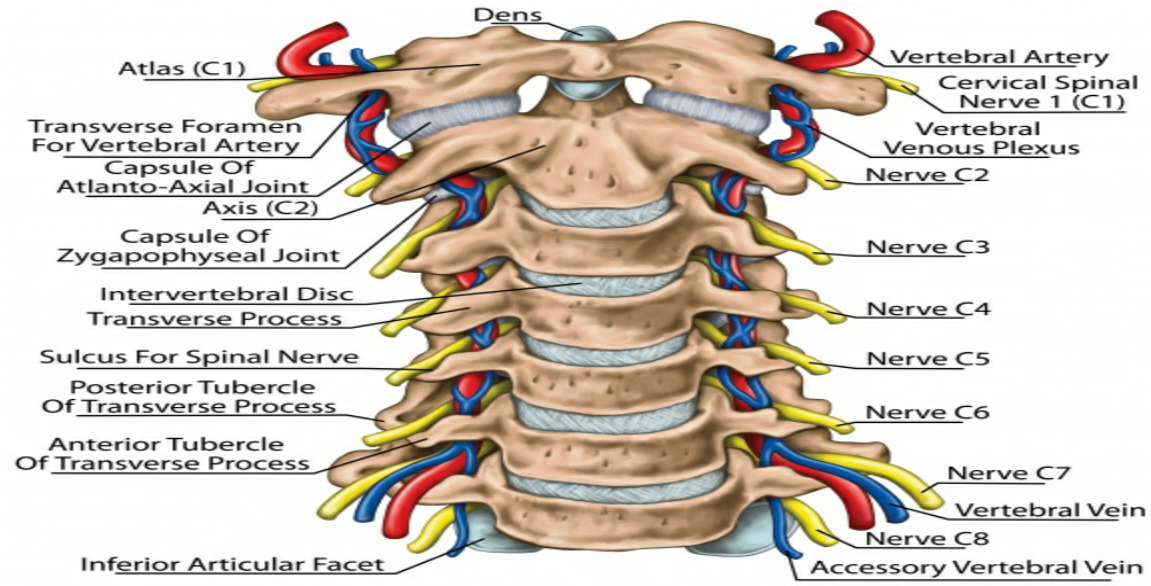
vertebral body. Each disc acts as an inter-body spacer produce disc height or space between its upper and lower vertebrae. This space creates open nerve passage called for-amen or neuroforamen at both sides. Nerve roots branch off the spinal cord and exit the spinal canal through neuroforamen.



Cervical spine:

The cervical spine, is a complex makeup the first part of the SC starting instantly after the skull and ending at the first T1. The neck is unique in that it supports the weight of your head (10 to 11 lb) and allows a mixture of head/neck motion, such as turning your head from side to side, nodding, and looking up and down. The cervical column is comprised of C1 to C7 uniquely shaped to protect the spinal cord that descend from the base of your skull and the spinal nerves or root that exit the spine between each set of bones.

The upper cervical spine is like any other part of the vertebral column. The atlas and axis are part of the spine's craniovertebral junction (CVJ)—this is where the base of your brain becomes part of your spinal column. Working together, the atlas and axis are primarily answerable for spinal rotation, flexion (bend forward) and extension. This is the most motorized section of your entire spine. Roughly 50% of flexion and extension of the neck, similar to nodding your head occurs here and 50% of rotation also occurs here.



Q4: Write the deffrinces between male and female pelvis ?

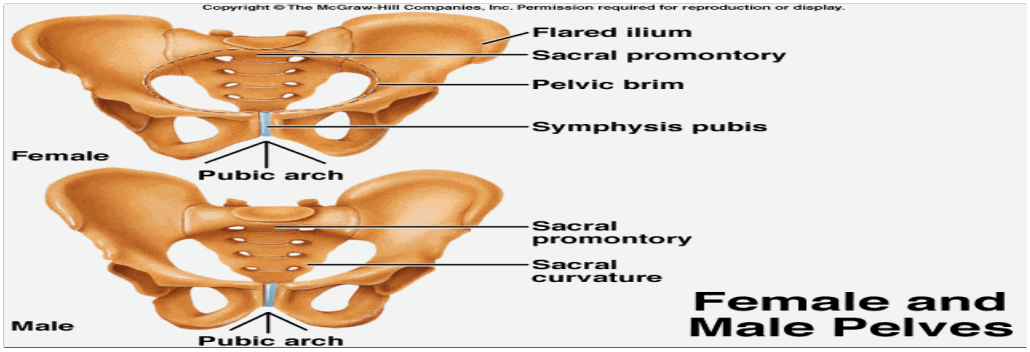
ANS.difference btw male and female pelvis:

Male pelvic:

1. The male pelvis has become inlet.
2. His illiac crest in mare larger than female
3. The male sacrum is larger, strap-like, aligned.
4. inferior pubic rami angle is 70 degree
5. Distance btw ischium is small in male

Female pelvic:

1. The female pelvis is larger and wide than the male pelvis.
2. inferior pubic rami angle is 90 -100 degree.
3. The greater sciatic notch is broad in females.
4. The female sacrum is shorter, wider, more curved back
5. The acetabula are broad apart and face more medially in females than males.



Q5: Write a note on formation of common bile duct (CBD) also name the arteries of upper leg ?

ANS :

Formmation of bile duct:

A bile duct is any of a figure of long tube-like structures that carry bile, and is existing in most vertebrates.

Bile, necessary for the chemical action of food, is secreted by the liver into passages that carry bile toward the hepatic duct, which joins with the cystic duct to form the common bile duct, which opens into the bowel.

The top half of the common bile duct is associated with the liver, while the bottommost half of the common bile duct is connected with the pancreas, through which it passes on its way to the gut. It opens into the part of the intestine called the small intestine via the ampulla of Vater.

The biliary tree (see below) is the whole network of various sized ducts branching through the liver.

The path is as follows: Bile canaliculi → Canals of Hering → interlobular bile ducts → intrahepatic bile ducts → left and right hepatic ducts merge to form → common hepatic duct exits liver and joins → cystic duct forming → common bile duct → joins with pancreatic duct → forming ampulla of Vater → enters duodenum.

Upper leg artery:

Right subclavian artery-----axilary artery-----human circumflex artery____deep brachaile ____brachail artery___ulnar collatoral____ radial artery___ anterior crural introsscious___ ulnar___ deep pulmar___ superficial pulmar_____digital

THE END .