



RADIOLOGY TEAM

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OSPE

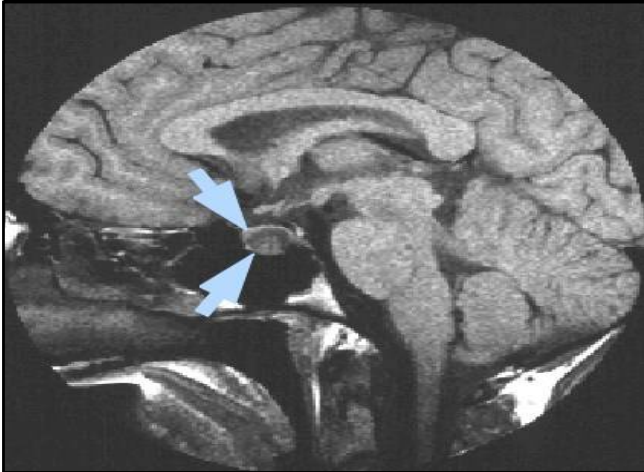
Radiology Pituitary & Adrenal Glands



***KSU | Collage of Medicine
2nd Year | CNS BLOCK***

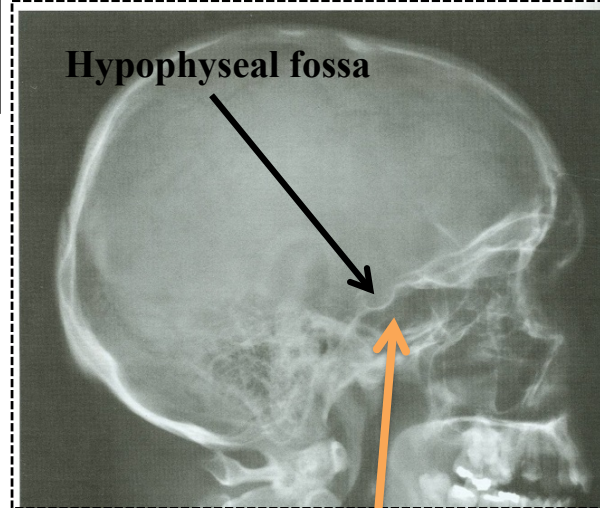
PITUITARY GLAND (HYPOPHYSIS CEREBRI)

MRI



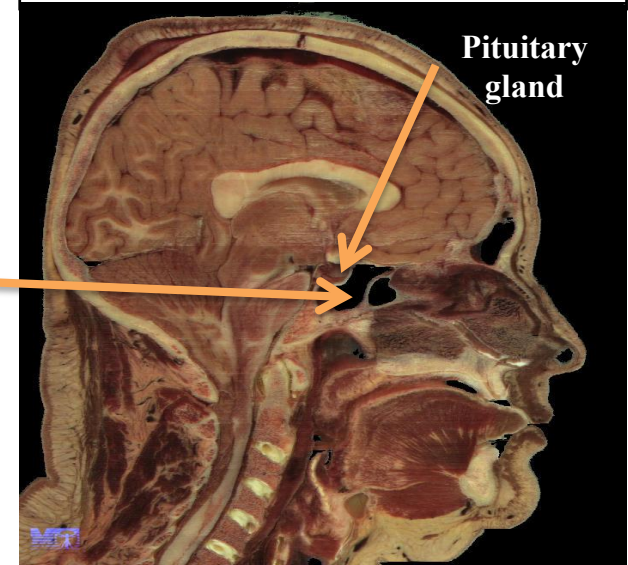
We highly recommend reading anatomy lectures of Pituitary and adrenal glands. Specially for relations, position and blood supply

**X-RAY SKULL*:
LATERAL VIEW**

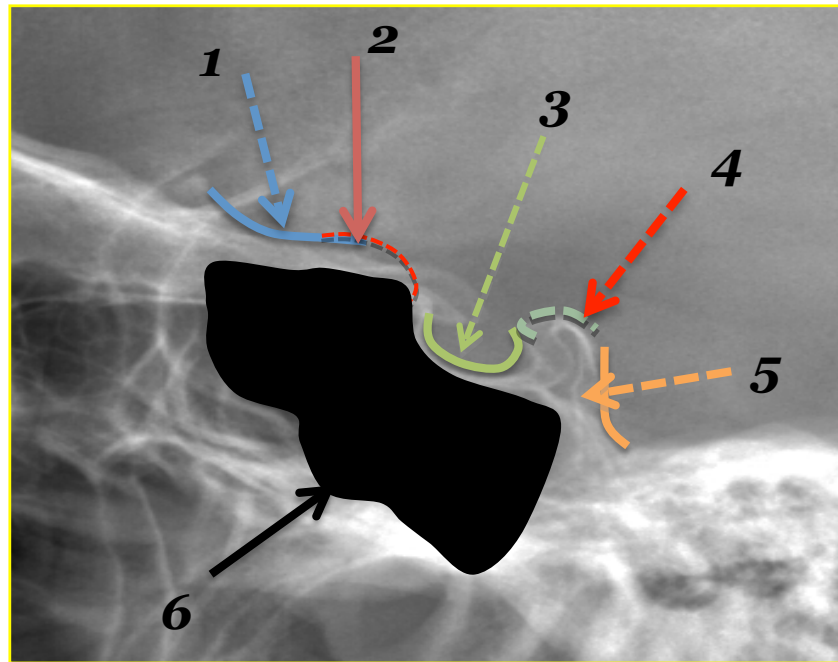
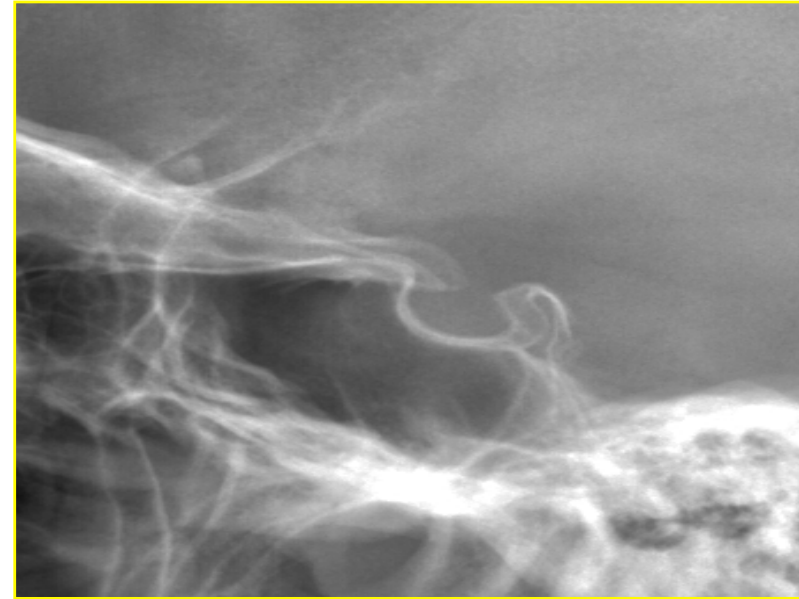
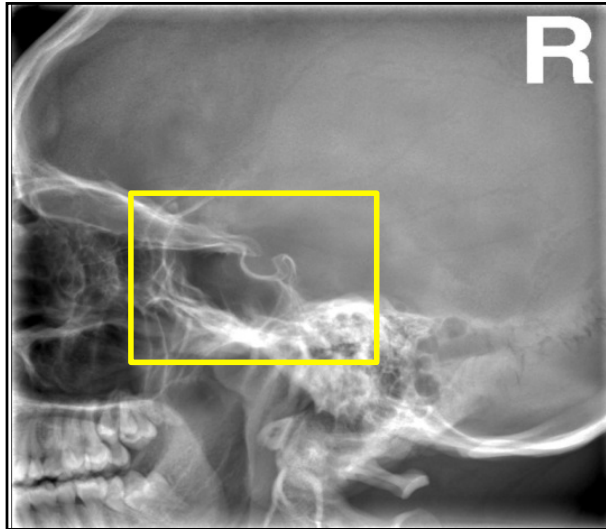


Sphenoidal air sinus

**SAGITTAL SECTION OF
HEAD & NECK**

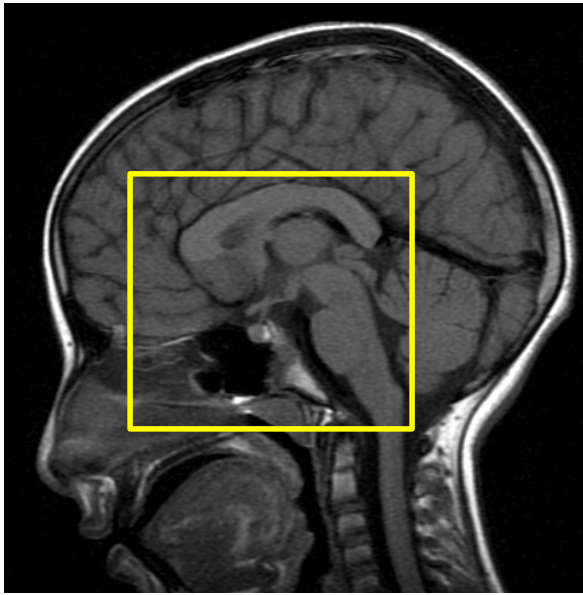


- ❑ Best diagnostic method of pituitary gland diseases is MRI
- ❑ X-ray can't show Pituitary gland.
- ❑ Ultrasound is not used here (used in GIT)



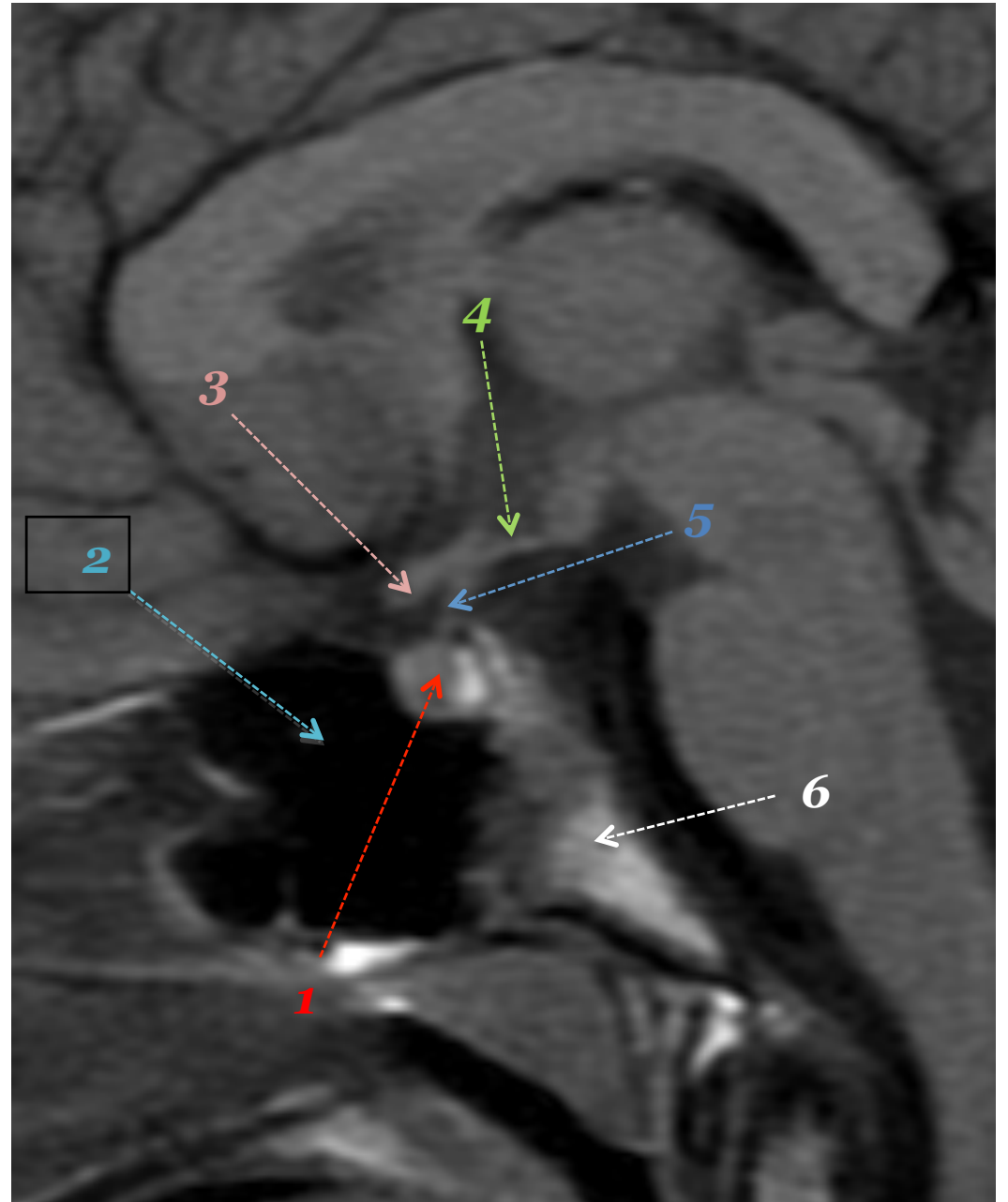
X-RAY:

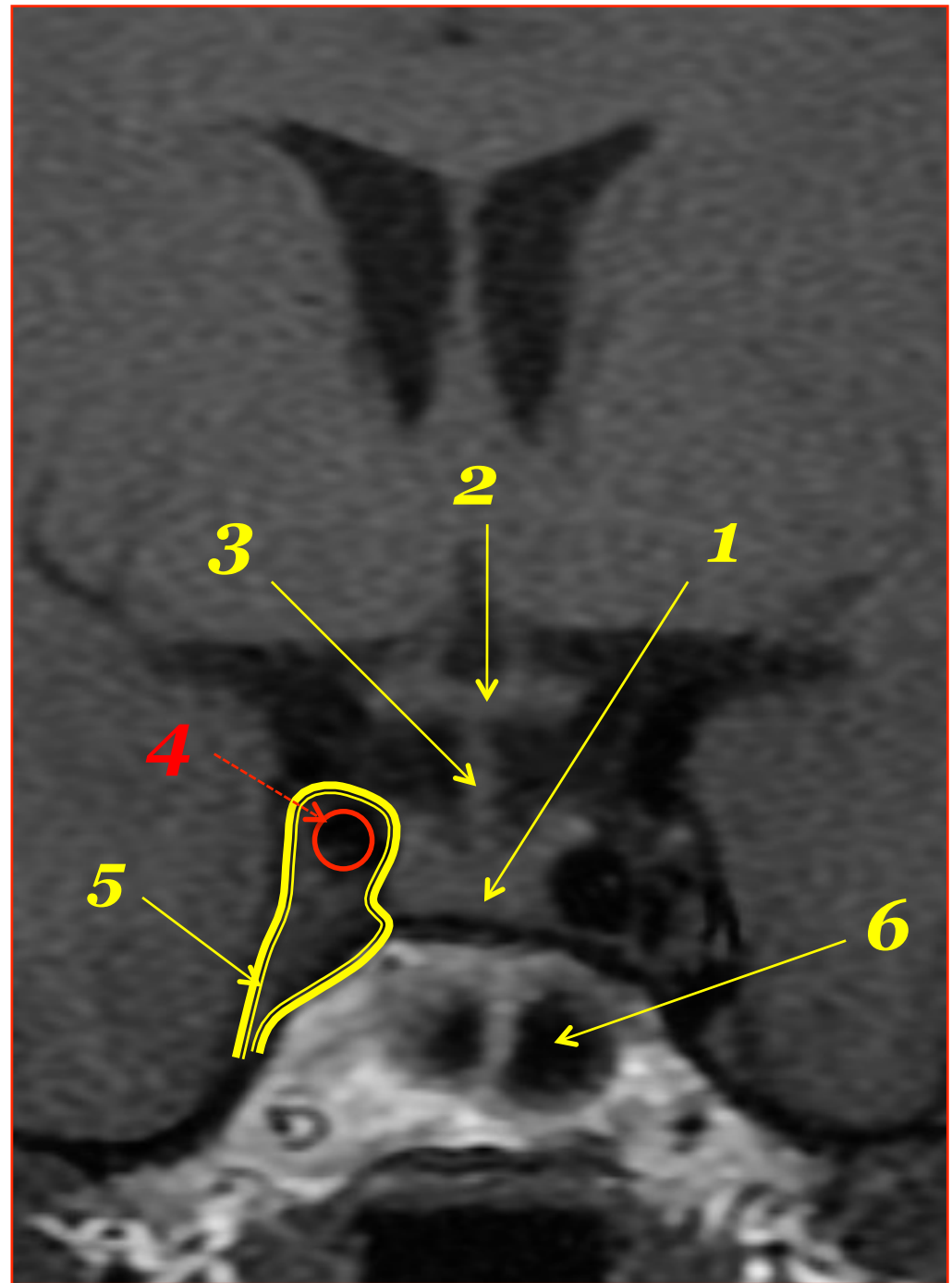
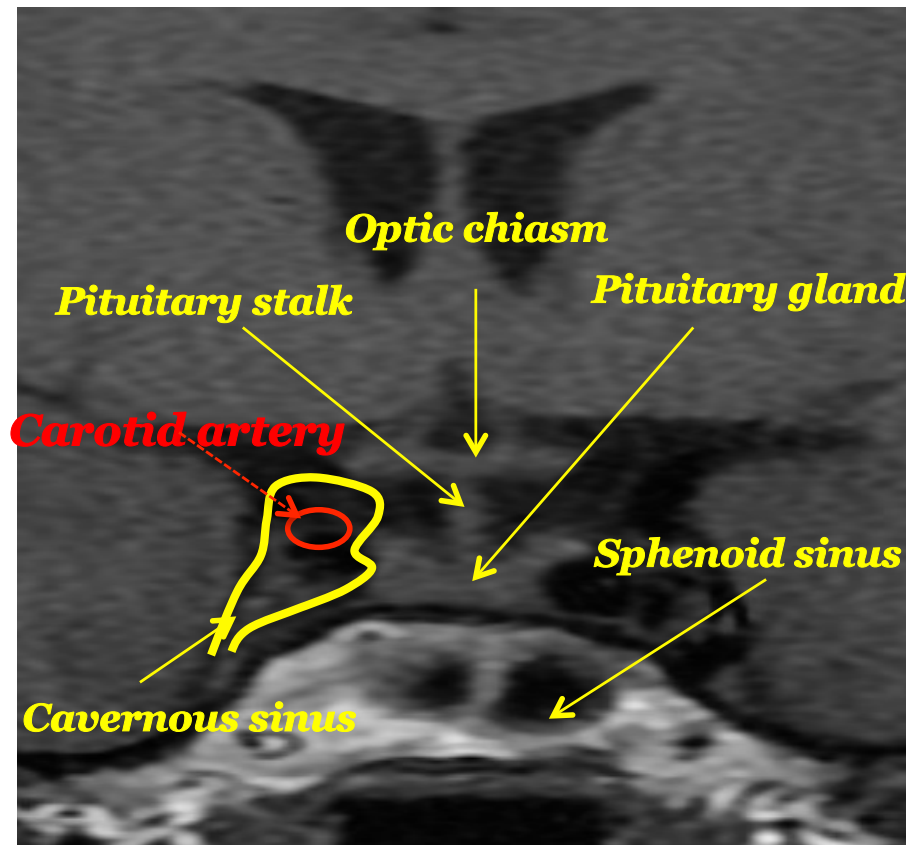
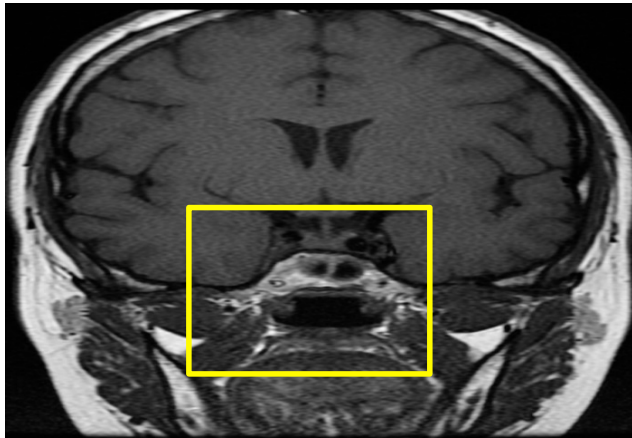
- 1-Optic sulcus
- 2- Anterior clinoid process
- 3-Floor of sella turcia (Pituitary fossa)
- 4- Posterior clinoid process
- 5- Dorsum sella
- 6- Sphenoid sinus



MRI

- 1- pituitary gland**
- 2- sphenoid sinus**
- 3- optic chiasm**
- 4- hypothalamus**
- 5- pituitary stalk**
- 6- claivus**



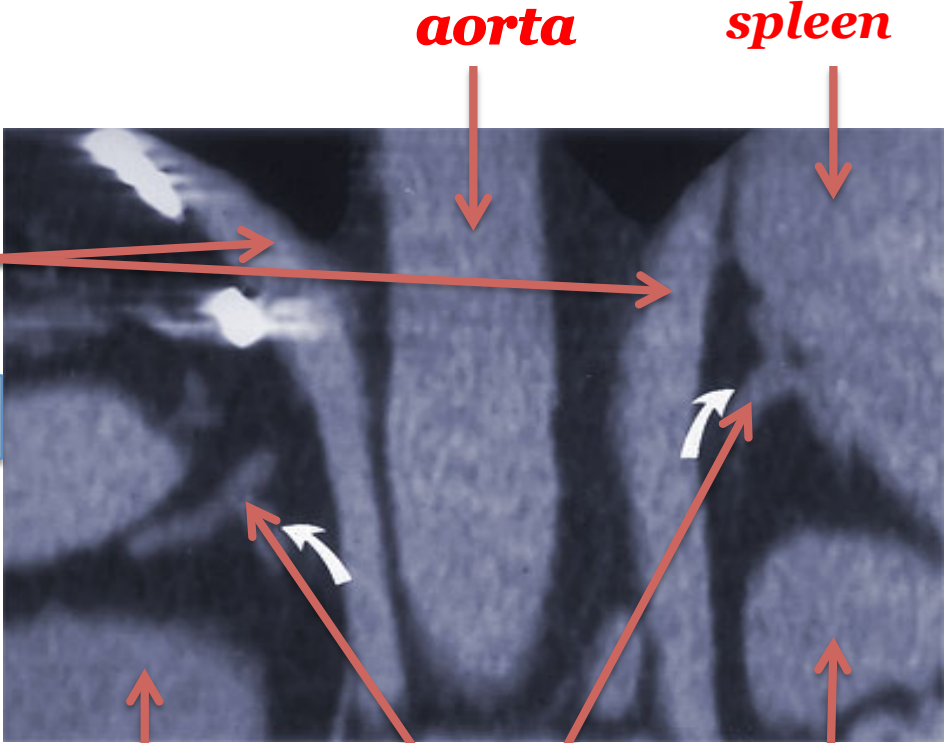


You can differentiate between CT and MRI by the color of the bone (CT is white and MRI is Dark)

CT and MRI
Are the best for
Imaging the
adrenal glands

**Right and left
Diaphragmatic
crus**

Coronal CT Scan



**Right
kidney**

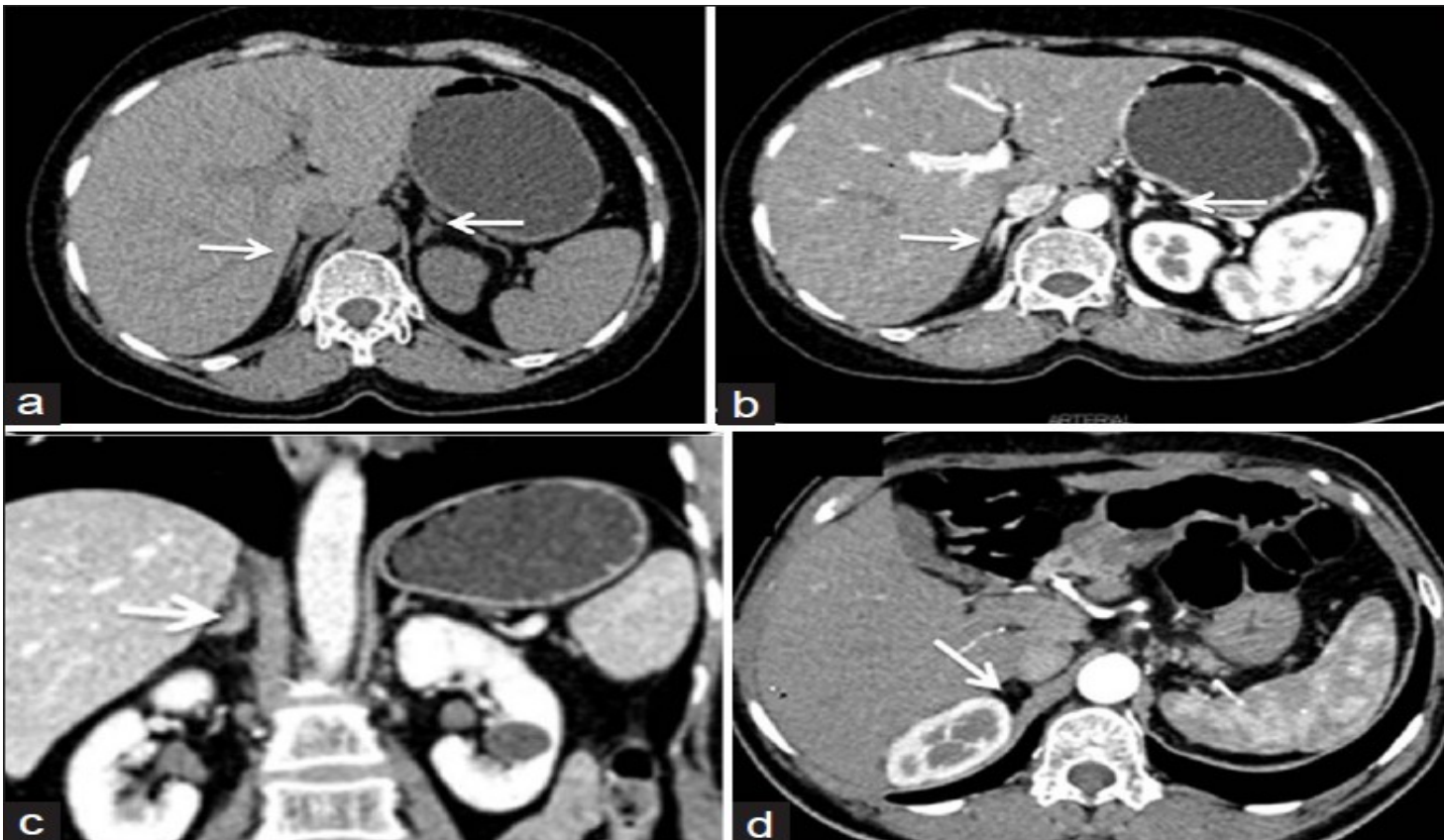
**Right and
left adrenal
glands**

Left kidney

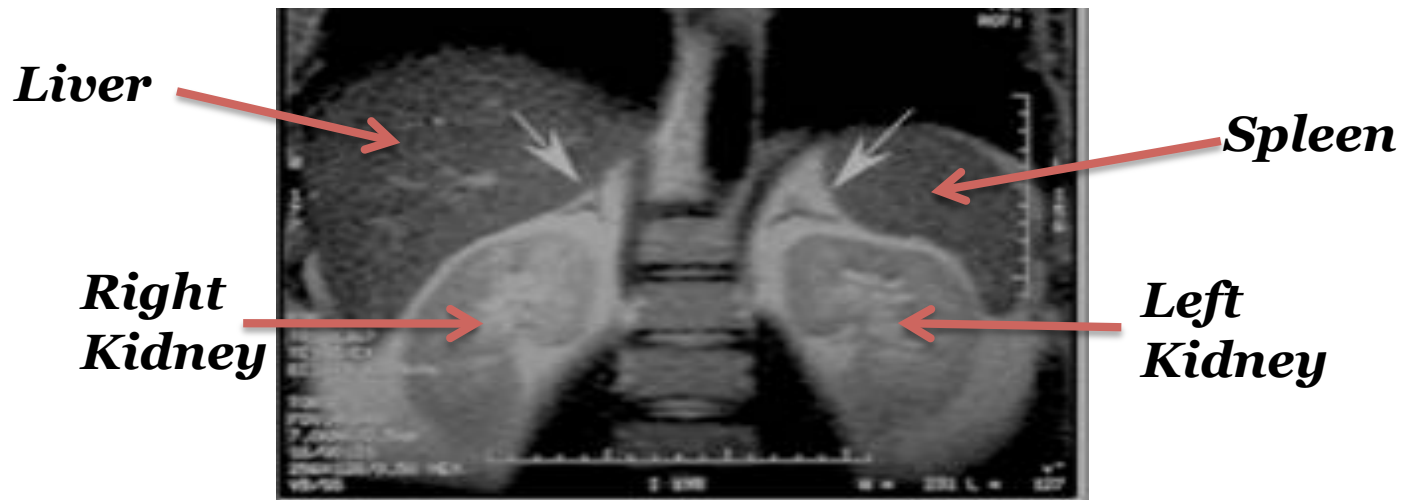
Axial CT Scan

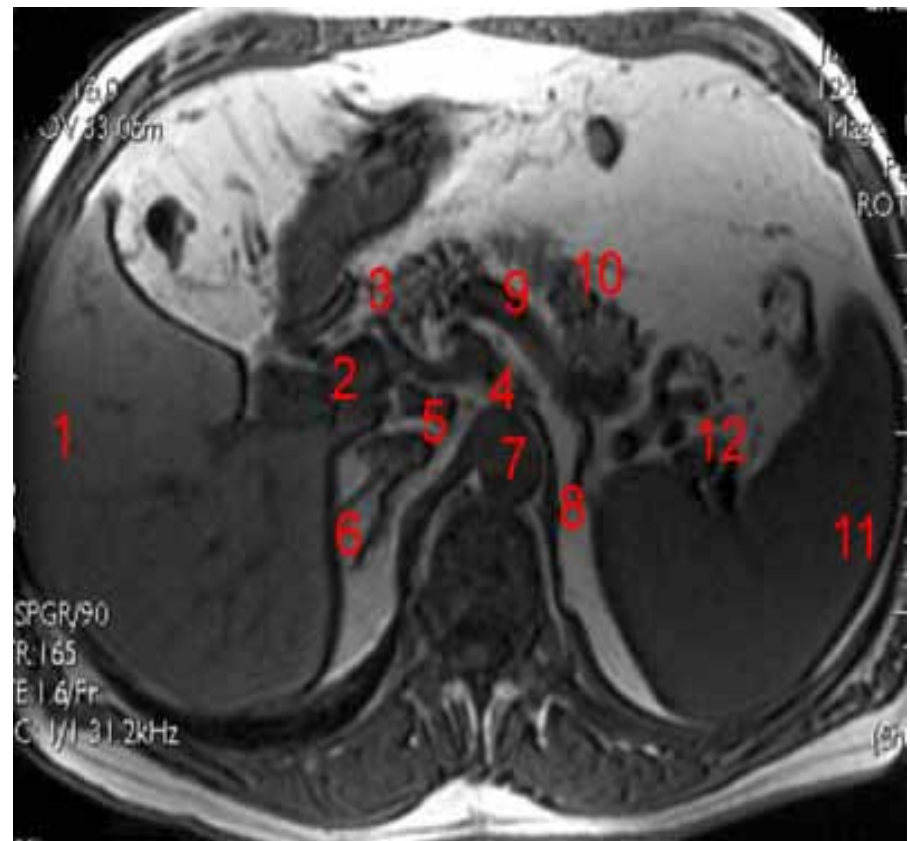
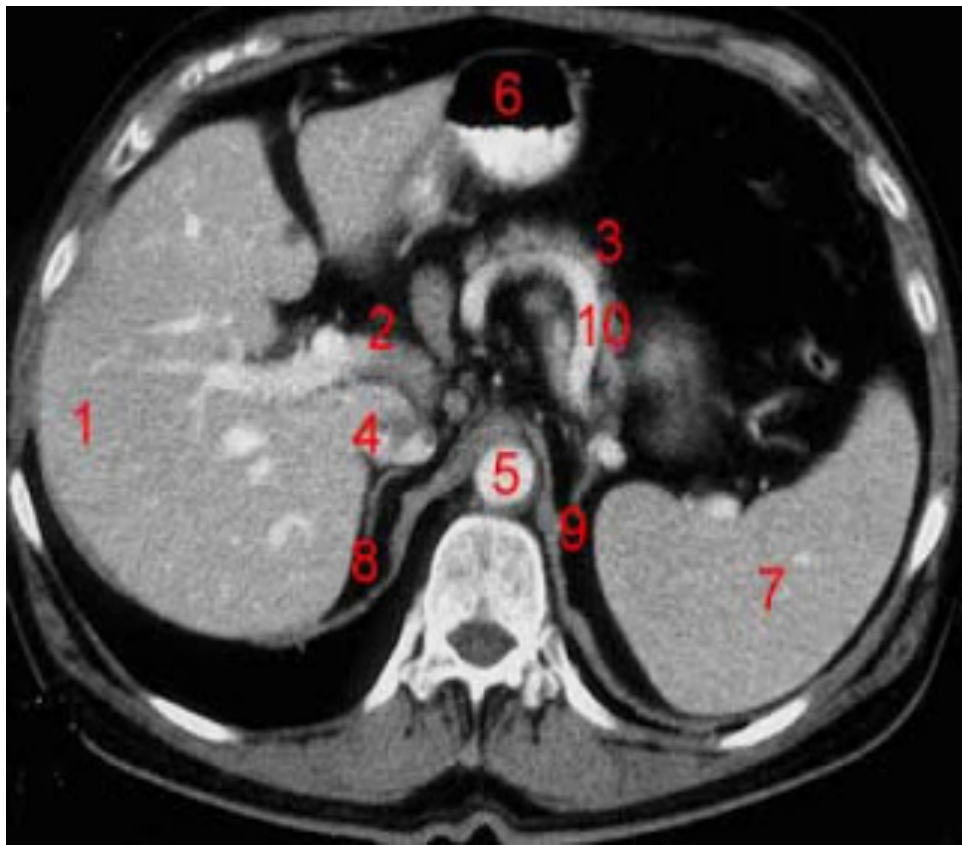
Right adrenal

Left adrenal



***All arrows pointed to the adrenal glands
(Make sure in exam to right if it's right or left)***





Axial CT of
abdomin

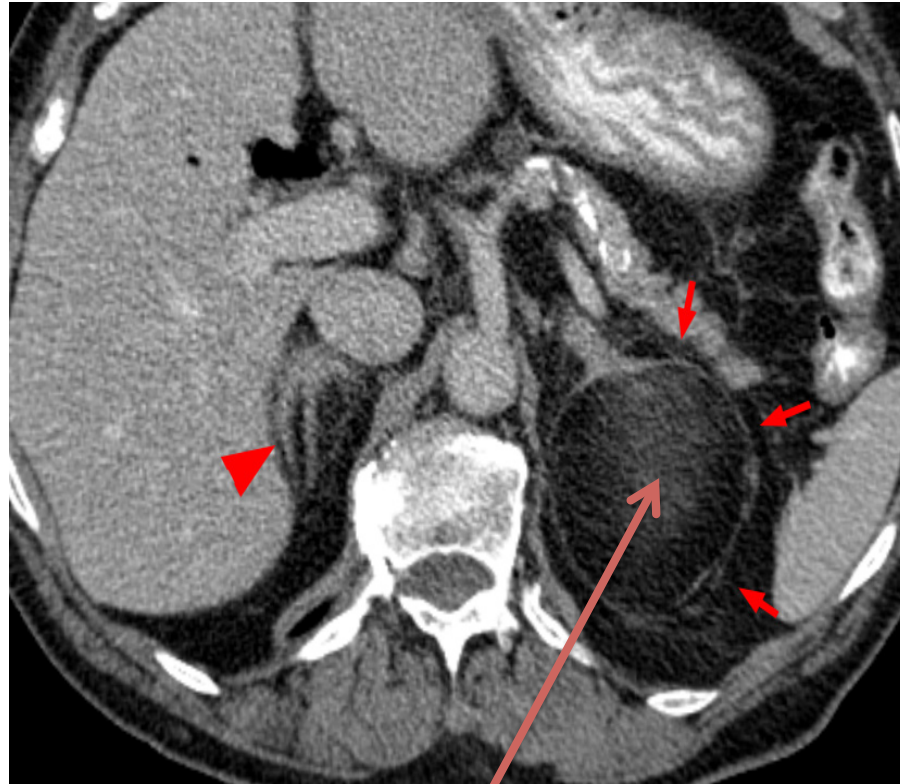
Axial MRI of
abdomin

- 1. Liver**
- 2. Portal Vein**
- 3. Pancreas**
- 4. Inferior Vena Cava**
- 5. Abdominal Aorta**
- 6. Stomach**
- 7. Spleen**
- 8. Right Adrenal**
- 9. Left Adrenal**
- 10. Splenic artery**

In this picture you just have to know the following:

- 1- Liver**
- 5- Inferior Vena Cava**
- 6- Right Adrenal**
- 7- Abdominal Aorta**
- 8- Left Adrenal**
- 11- Spleen**

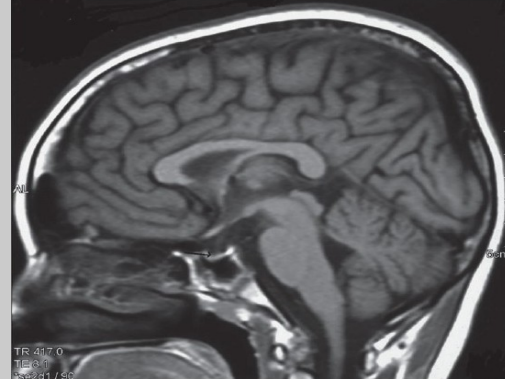
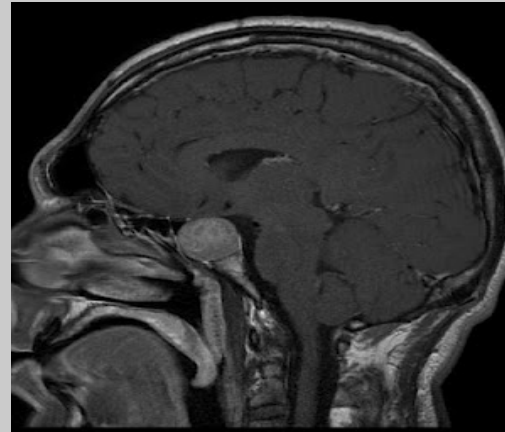
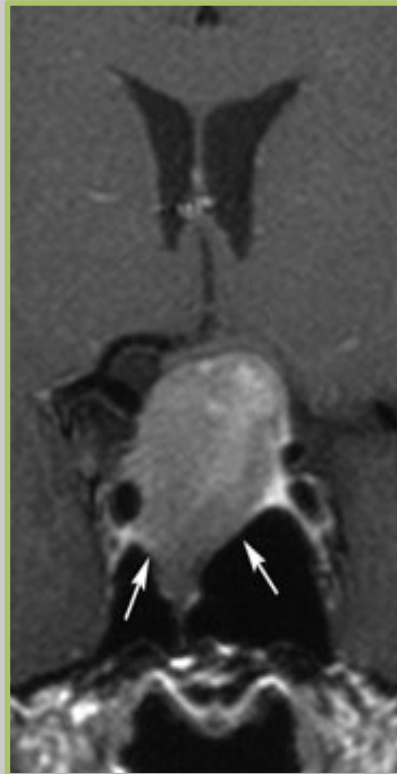
Pathology of the adrenal gland



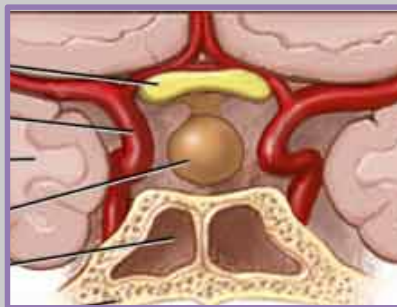
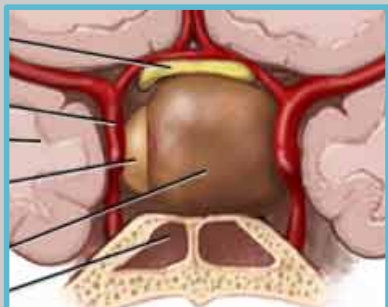
Lipoma of the adrenal gland

Pathology of the pituitary gland

Pituitary Adenoma



Normal



❖ What is best modality to image the pituitary gland ?

- A. X ray
- B. CT scan
- C. MRI**
- D. US
- E. Nuclear medicine



Best Wishes

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