# Neurosurgical and Vascular Surgical anatomy

#### Outline

- O Sectional imaging of the brain
  - 0 Anatomy
  - O Detecting pathology
- O Common vascular surgery operations

# Neurosurgical anatomy

#### Sectional anatomy: Brain

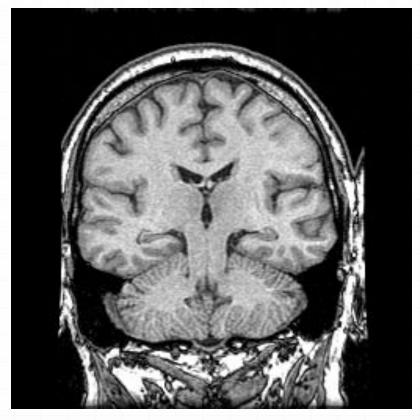
- 0 Cerebrum
- O Cerebellum
- **0** Brainstem

#### Cerebrum

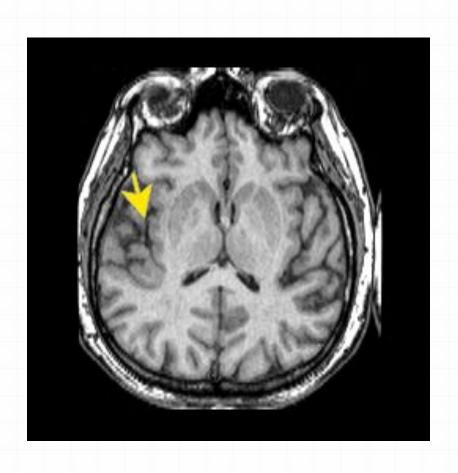
- 0 4 layers
  - 0 Ventricles
  - O Deep nuclei
  - 0 White matter
  - O Cortex

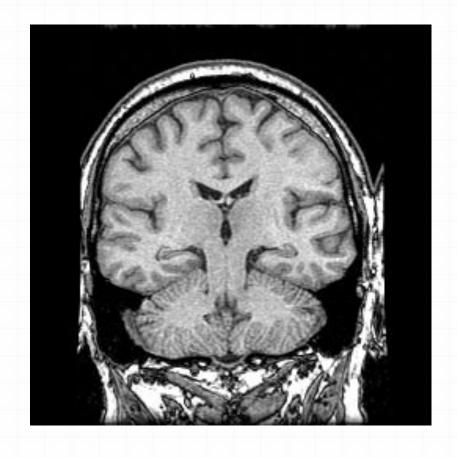
#### Ventricles



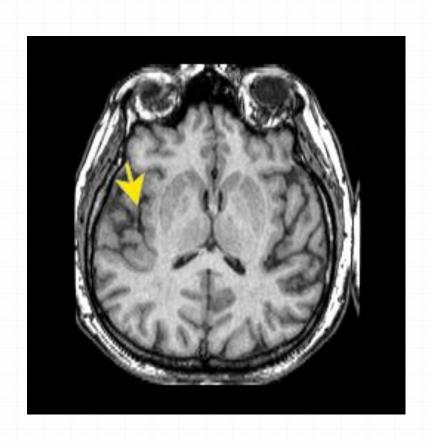


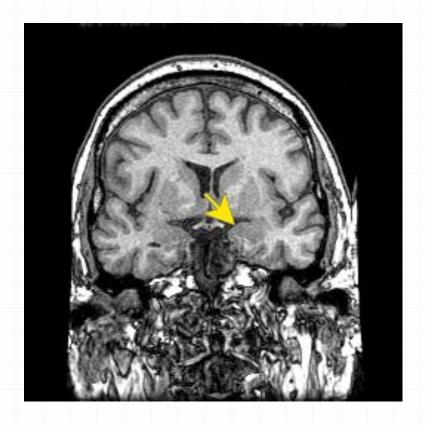
### Deep nuclei



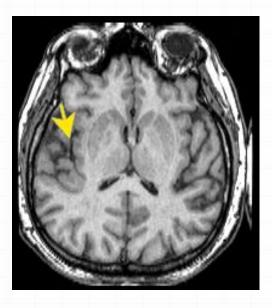


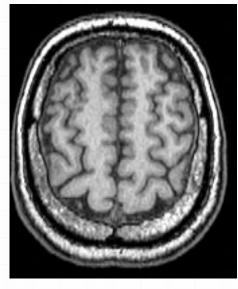
#### White matter

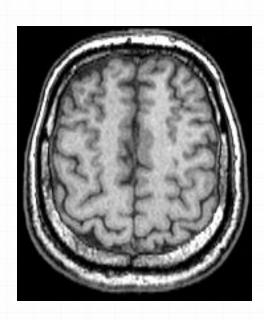




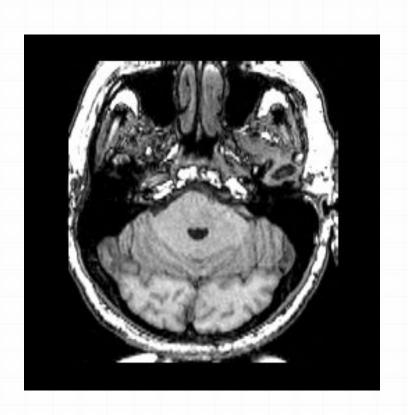
#### Cerebral cortex

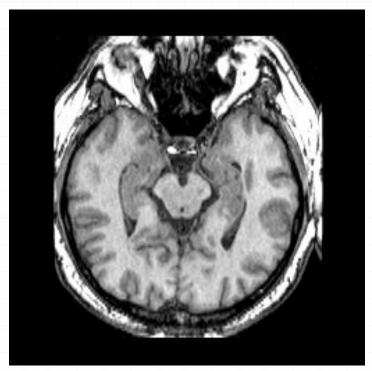






#### Brainstem and Cerebellum



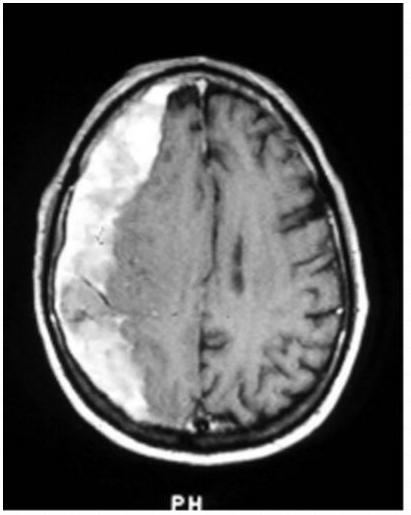


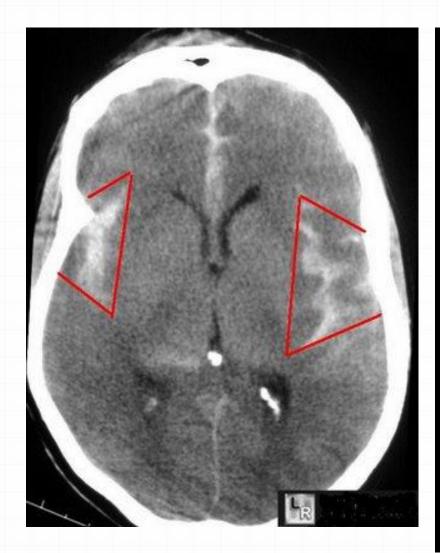
#### Detecting pathology

#### 0 5 check areas

- O Extra-axial Bleeds + Collections Extradural, subdural, and subarachnoid, meningiomas
- O Intraxial Masses, oedema, haemorrhage
- O Basal cisterns and ventricles Mass effect (midline shift, compressed ventricles), Hydrocephalus, occult subarachnoid blood
- O Blood vessels
- O Bones Fractures, acoustic neuromas

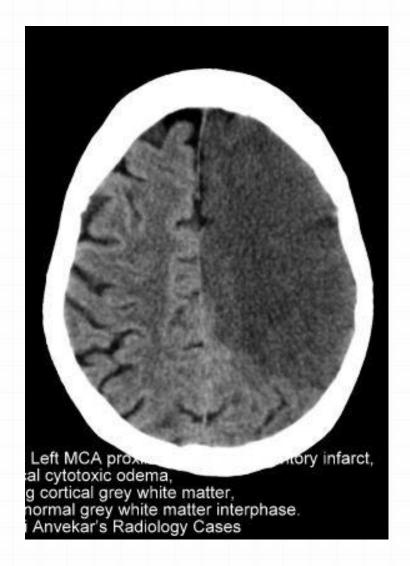


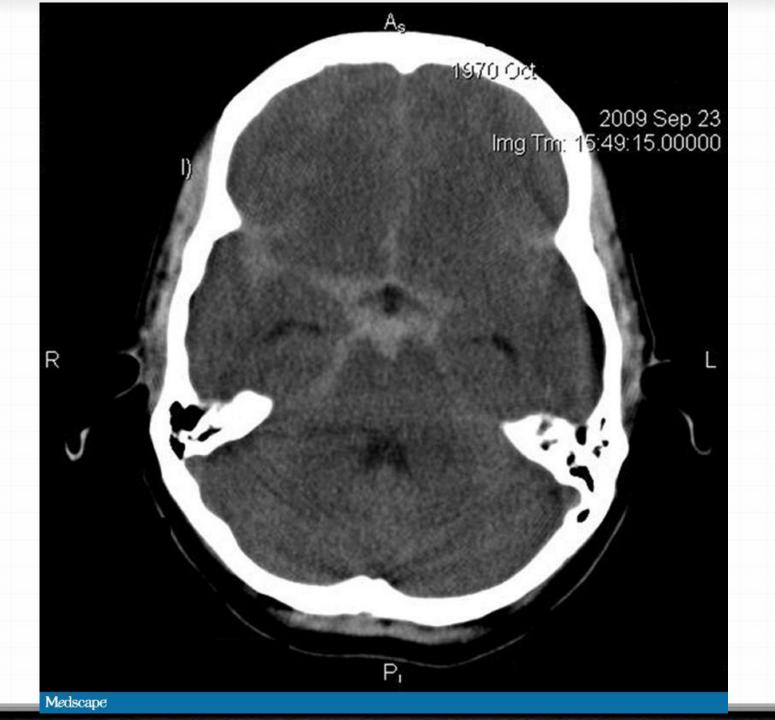


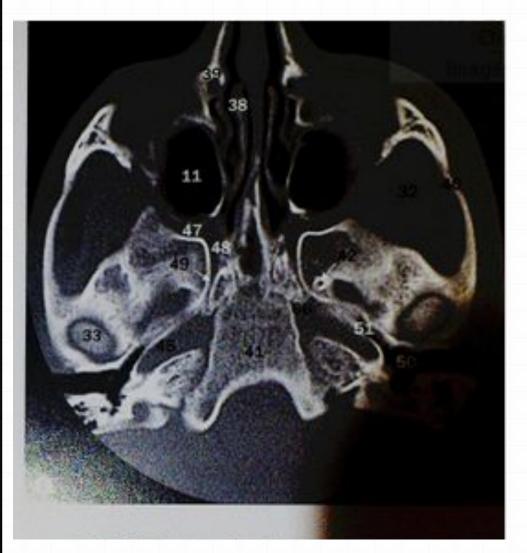


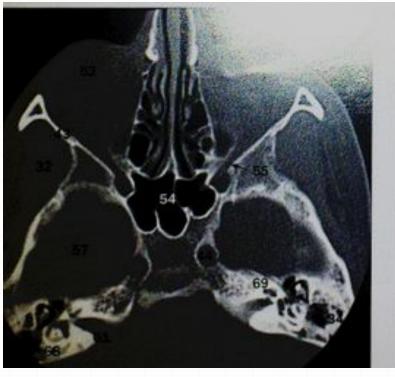




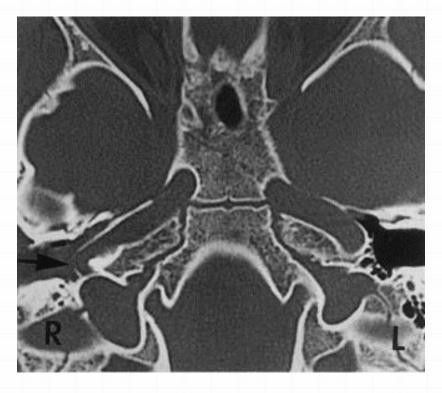


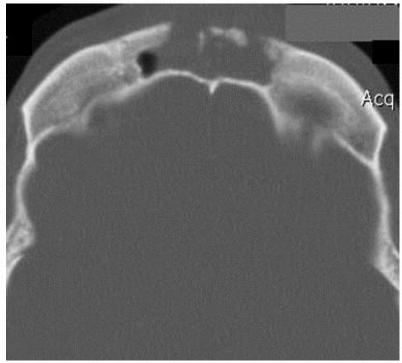












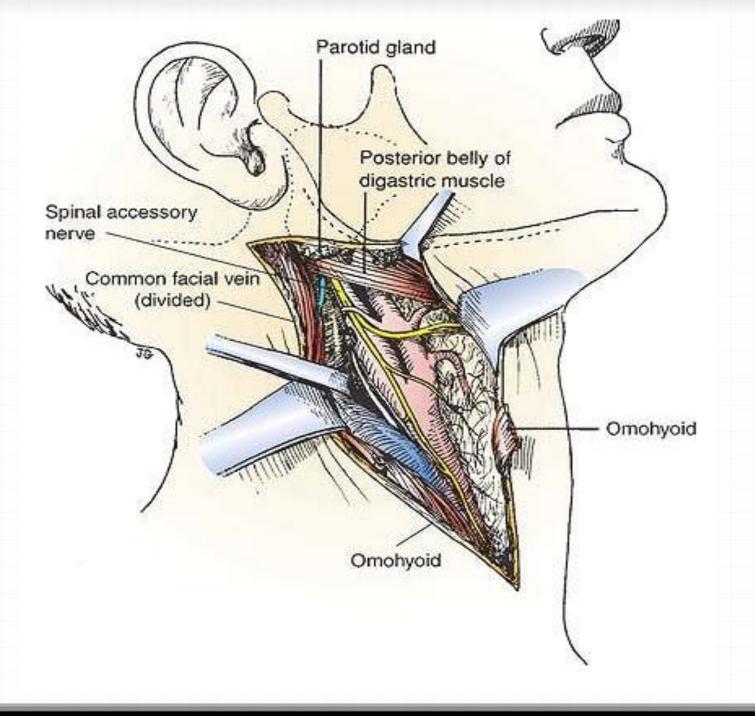
## Vascular surgical anatomy

#### Common operations

- O Common carotid artery
- 0 Brachial
- O Radial
- 0 Femoral
- O Popliteal

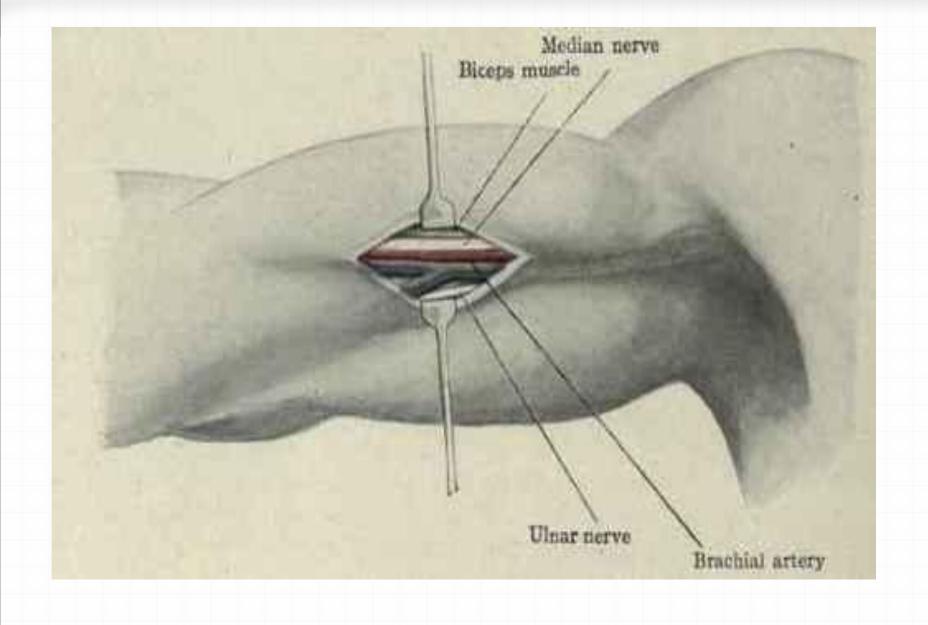
#### Common carotid a

- O Dangers
- 0 Layers



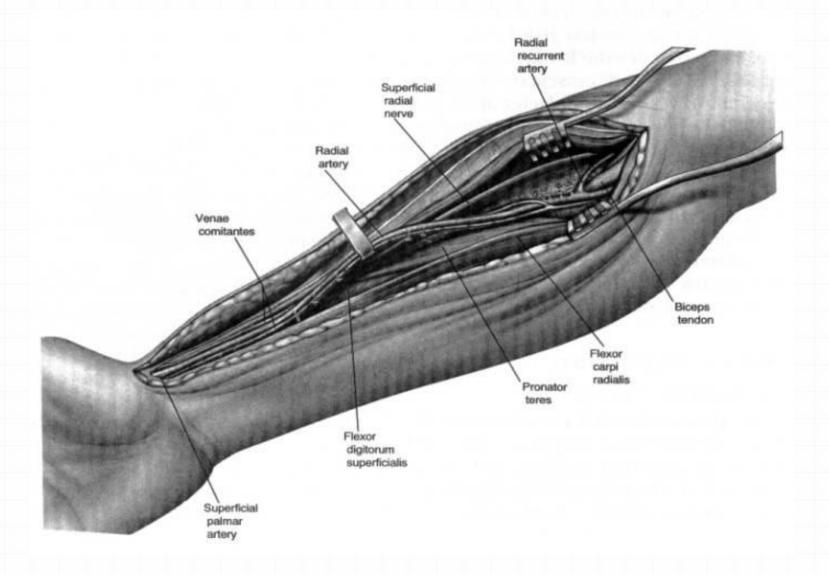
#### Brachial a

- O Dangers
- 0 Layers



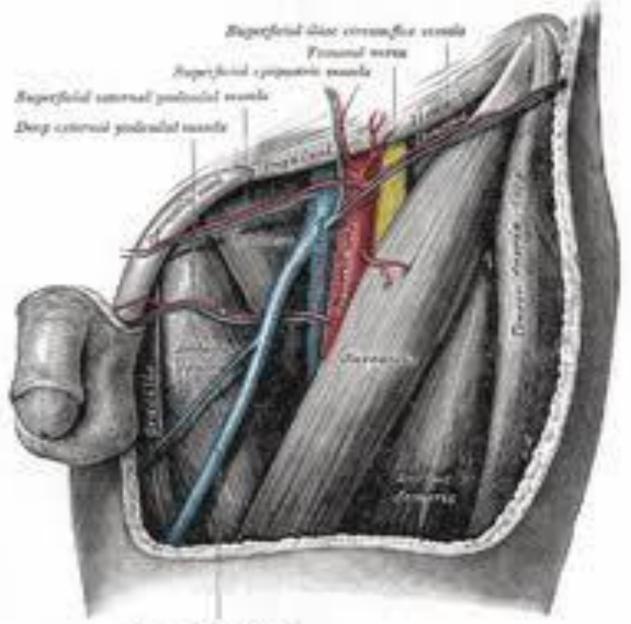
#### Radial a

- O Dangers
- 0 Layers



#### Femoral

- O Dangers
- 0 Layers



Climat aug/Armona solin

#### Popliteal artery

- O Dangers
- 0 Layers

