

Dermoid

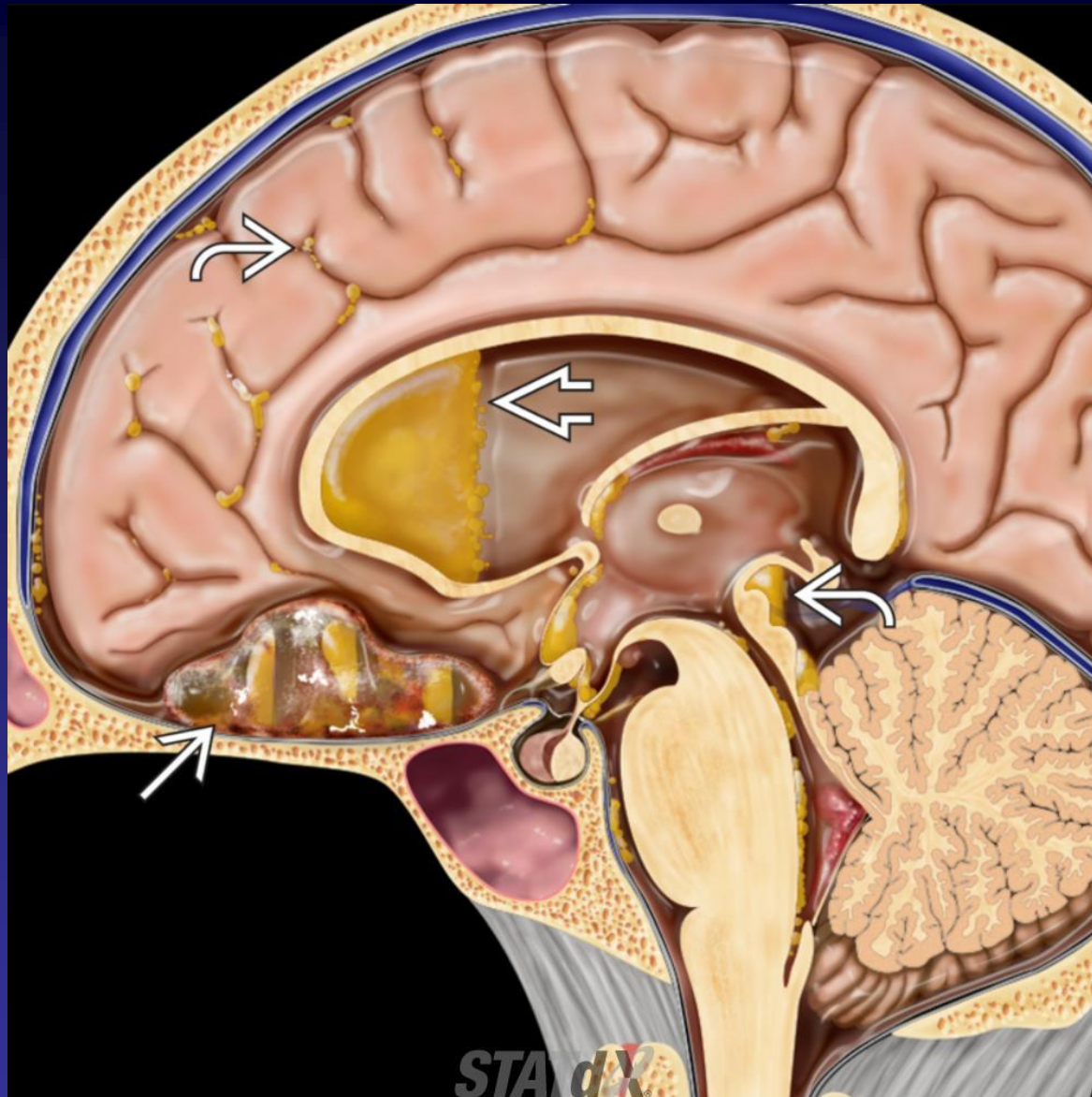
- Benign, ectopic, squamous epithelial cyst containing dermal elements, including hair follicles and sebaceous and sweat glands
- Rare: < 0.5% of primary intracranial tumors
- Intradural dermoid cysts 4-9x less common than epidermoid cysts
- Rupture can cause significant morbidity/mortality
- Dermoid + dermal sinus may cause meningitis, hydrocephalus
- Treatment: Complete surgical excision \pm shunt for hydrocephalus

Location

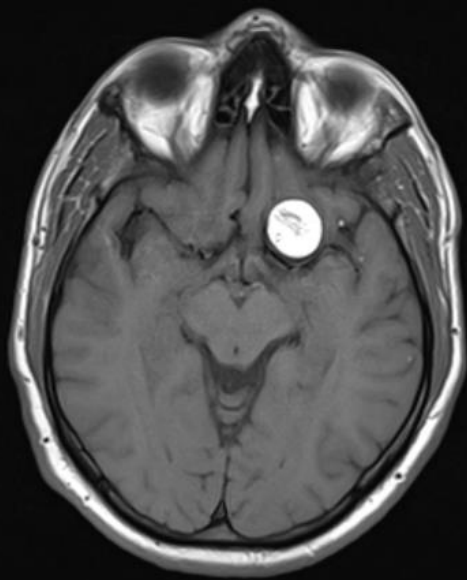
- Suprasellar, parasellar
- Less common in posterior fossa: Cisterna magna, 4th ventricle, and basal cisterns
- Extracranial sites = spine, orbit
 - May have fistulous connections to skin (dermal sinus tract)
 - Orbit: Dermolipoma at zygomatico-frontal suture
- Ruptured: Subarachnoid/intraventricular spread of contents

Imaging

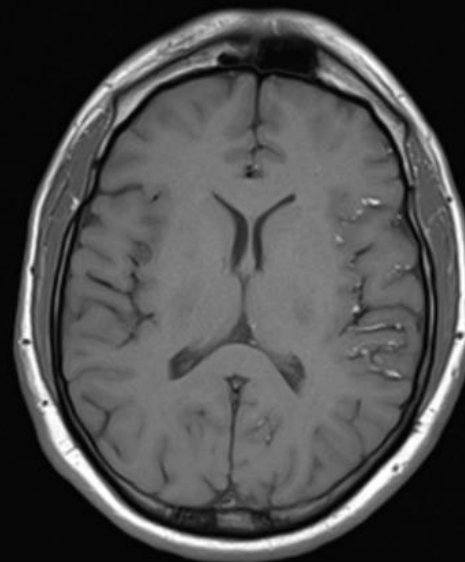
- Midline unilocular cystic lesion with fat
 - Subarachnoid fatty droplets if ruptured
- Suprasellar or posterior fossa most common intracranial sites
- Extracranial sites = spine, orbit
 - May have fistulous connections to skin (dermal sinus tract)
- CT hypodensity and negative Hounsfield units (fat)
 - 20% capsular Ca^{++}
- MR: T1 hyperintense
 - Fat-suppression sequence confirms lipid elements
 - Fat-fluid level in cyst and in ventricles (if ruptured)
- With rupture: Extensive leptomeningeal enhancement possible from chemical meningitis



Sagittal graphic of an inferior frontal dermoid (white solid arrow) shows a discrete, heterogeneous fat-containing mass with squamous epithelium and dermal appendages. There is a ventricular fat-fluid level (white open arrow) and fat within the subarachnoid spaces (white curved arrow) related to the rupture.



Ruptured parasellar dermoid cyst



Dermoid

