

# Neoplasms (Tumors)

## Benign

Benign tumors of the brain, dura and skull are relatively common. The most common are **meningiomas**, which arise from the dura (actually the arachnoid), and **schwannomas** which arise from the nerve sheath (similar to arachnoid) of the cranial nerves, most commonly the vestibular nerve (**vestibular schwannoma**, or **acoustic neuroma**).

There are many other benign neoplasms that occur in the skull and brain. A partial list are as follows:

- Bone osteoid osteoma, Langerhan's cell histiocytosis (LCH)
- Dura, arachnoid meningioma
- Cranial nerves schwannoma (acoustic neuroma)
- Choroid plexus choroid plexus papilloma
- Glia grade I astrocytoma (pilocytic astrocytoma), pleomorphic xanthoastrocytoma, ganglioglioma, subependymoma
- Neurons neurocytoma, ganglioneuroma, hypothalamic hamartoma
- Blood vessels hemangioblastoma
- Rathke's cleft Rathke's cleft cyst, craniopharyngioma
- pituitary gland pituitary adenoma
- Paraganglion cells glomus jugulare tumor
- Pineal body pineocytoma

Benign neoplasms do not invade surrounding tissues nor spread to distant sites like malignant tumors. They cause symptoms by local growth causing brain and nerve compression and sometimes by bone destruction. Benign tumors can be cured by complete surgical removal. However they can grow back if not removed completely.

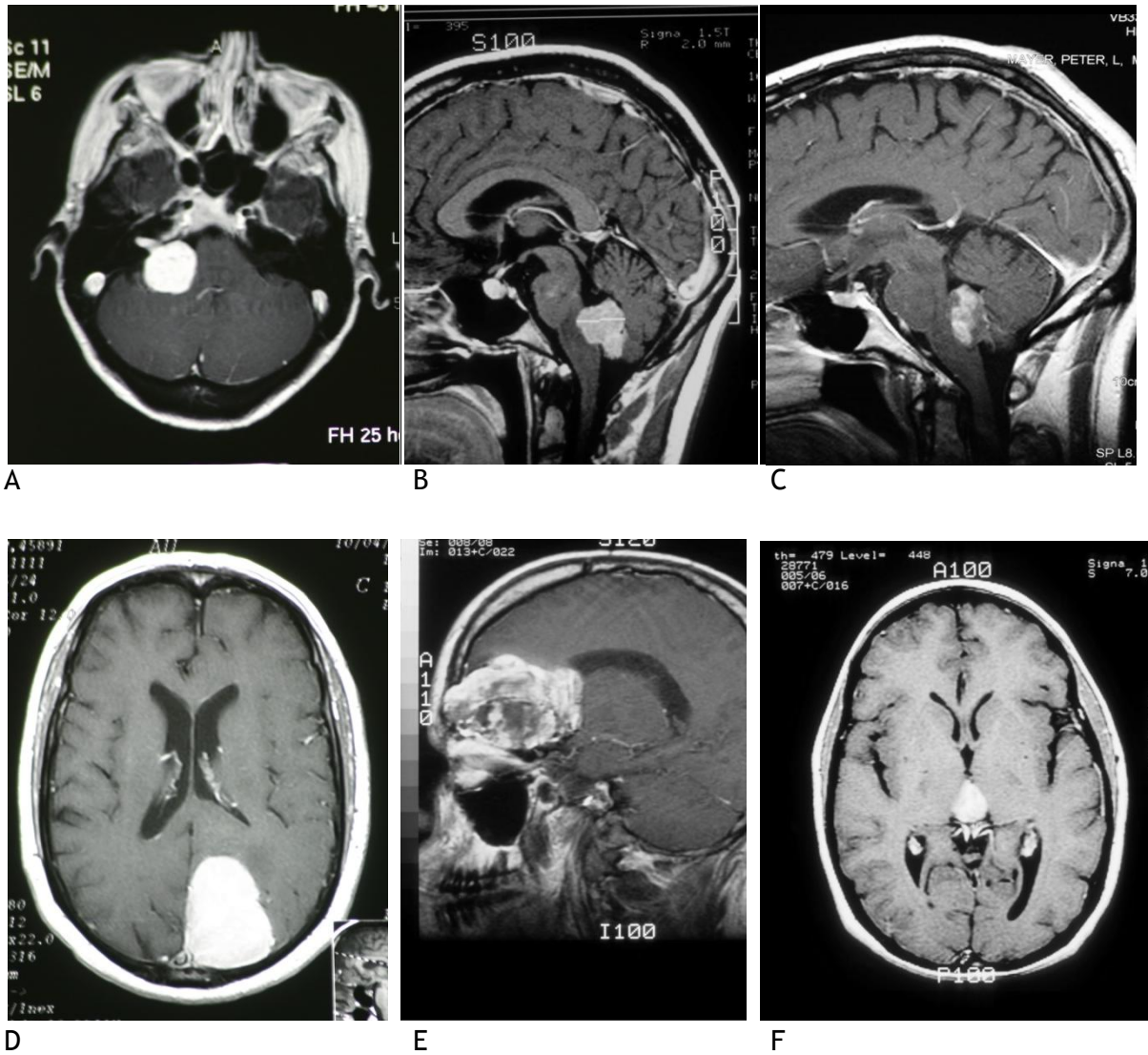


Figure 7: Benign brain tumors.

- A. Acoustic neuroma (vestibular schwannoma).
- B. Choroid plexus papilloma of 4<sup>th</sup> ventricle.
- C. Subependymoma of 4<sup>th</sup> ventricle.
- D. Meningioma.
- E. Neurocytoma.
- F. Pineocytoma.