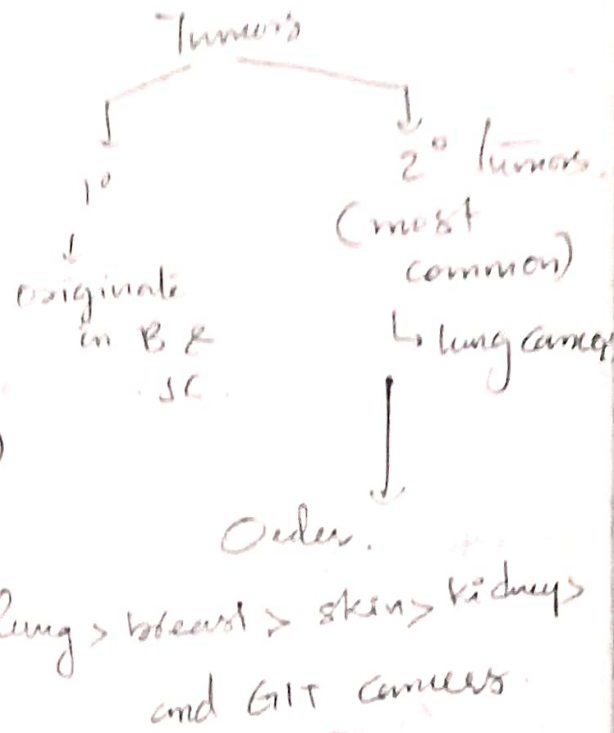
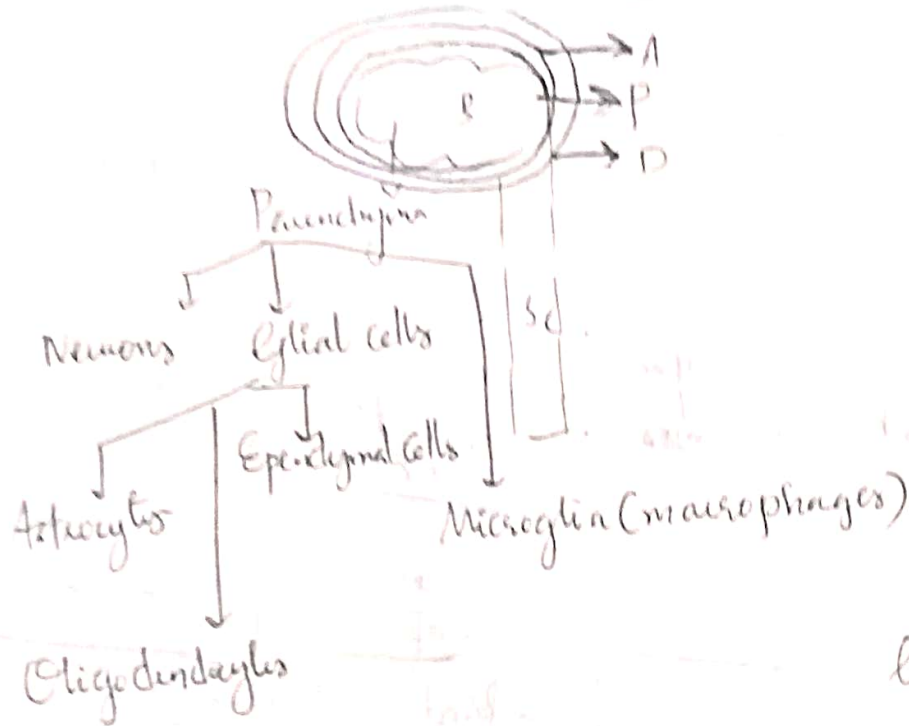
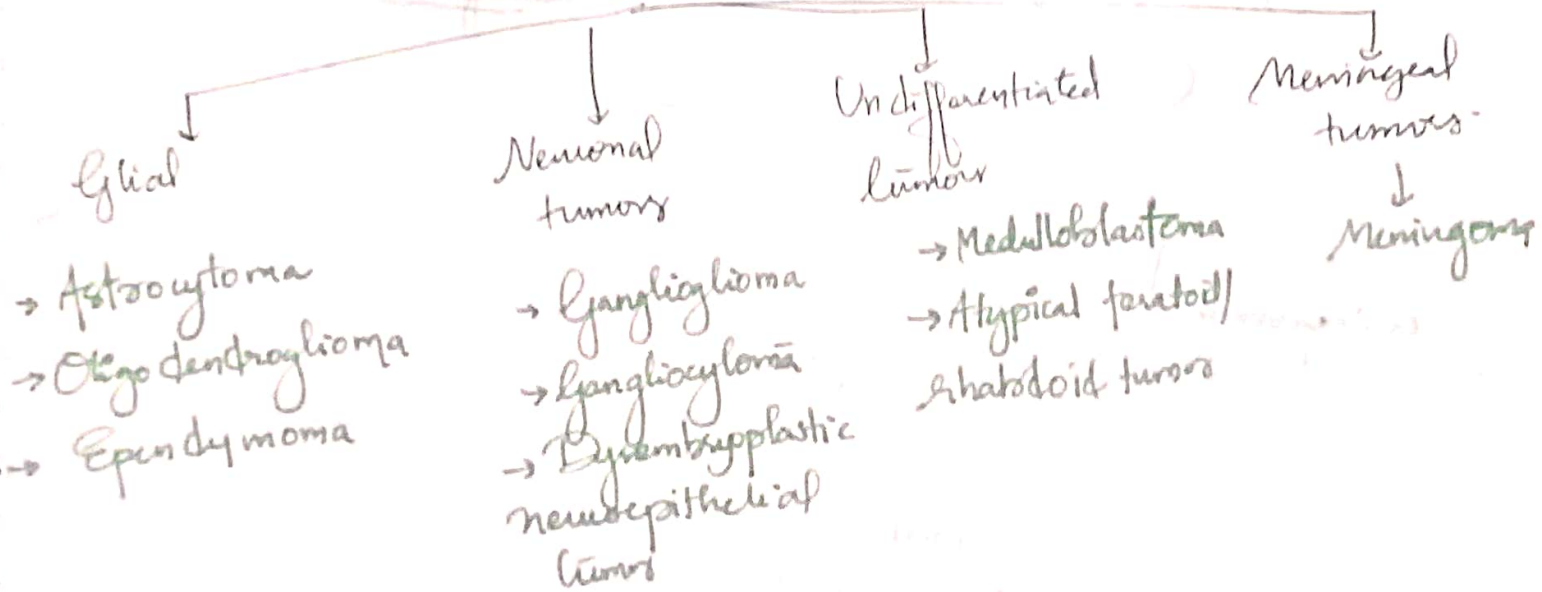


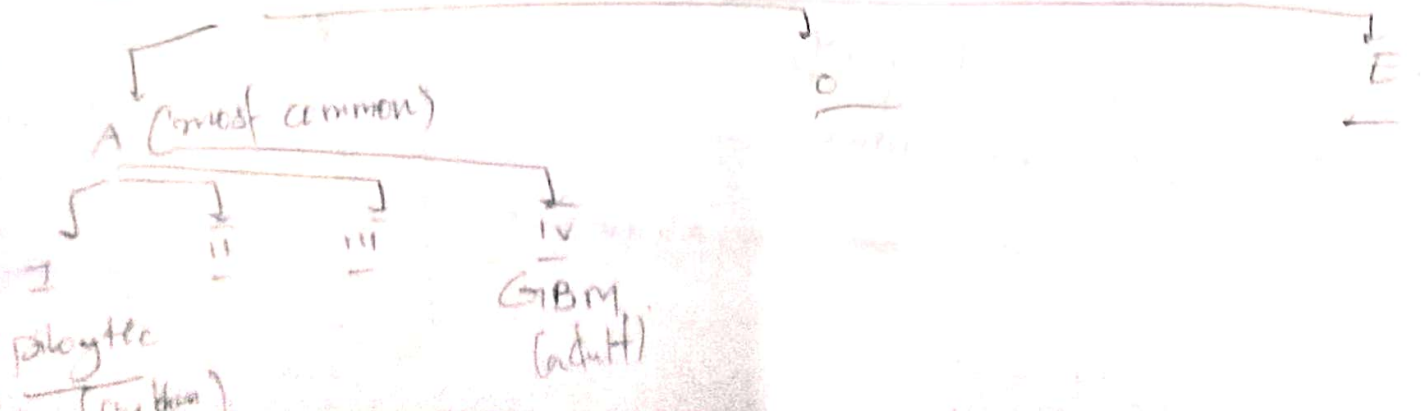
CNS Tumours



Brain Tumors



Gliomas (most common)



	Pilocytle (I) astrocytoma (children)	Glioblastoma Multiforme (6th decade)	Oligodendroglioma	Ependymoma (below 20 yrs age)
MC site	Cerebellum & Brainstem	Cerebral hemispheres (temporal & frontal lobes)	Cerebral hemispheres (white matter)	→ 1 st 2 decades → 4th ventricle → <u>NE types</u> (ependymal)
Gross	→ well circumscribed → commonly cystic	→ Irregular appearance → butterfly tumors	→ Gelatinous mass with foci of hemorrhage & calcification	→ well demarcated tumors
Microscopy	→ Rosenthal fibers → Inclusion bodies (made of GFAP protein)	→ <u>neuring</u> → <u>pseudopalisading necrosis</u> → pleomorphic → mitosis → microvascular endothelial proliferation	→ All cells are uniform → <u>fried egg cells</u> → <u>calcification</u>	→ <u>rosettes</u> & <u>perivascular pseudorosettes</u> → <u>perivascular</u>

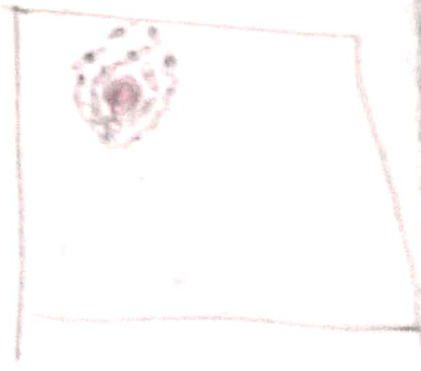
Meningioma

→ tumor of meninges.
→ arises from capsular layer of arachnoid.

MC site: lateral cerebral convexities, midline along the falx cerebri & olfactory groove

→ 2nd to 6th decade of life
→ female preponderance

(mostly benign, rarely malignant)



Gross .. Well circumscribed mass of varying size.
→ overlying bone shows hyperostosis.

Microscopy .. Psammoma bodies - calcifications arranged in whorls.
→ tumor cells are spindle cells arranged as whorls around psammoma bodies.

Medulloblastoma

- ↳ exclusively in Cerebellum
- ↳ 1^o malignant tumor in childhood.
- ↳ undifferentiated tumor.
- ↳ drops metastases.
- ↳ Radiosensitive

Gross → protrudes into 4th ventricle as a soft, grey & white mass or invades the surface of the cerebellum.

Microscopy

↳ Homer-Wright rosettes.

↳ tumor surrounding neurofil

↳ small round blue cells

↳ fibrillary centers



Nerve Sheath Tumors:-

Schwannoma (Neurilemoma).

→ Arises from Cranial & spinal nerve roots

→ Solitary nodule, multiple von Recklinghausen's dis.

→ Assoc. with NF type 2.

o Acoustic Schwannoma → Schwannoma of 8th nerve

o Invariably benign.

Gross → encapsulated solid tumour.

→ produce eccentric enlargement of the nerve root

→ Does not infiltrate the peripheral nerve.

Microscopy:

→ Two areas are seen histologically →

a) Antoni A pattern → dense & compact cellular areas shows palisade nuclei called Verocay bodies

b) Antoni B pattern → loose acellular areas.

