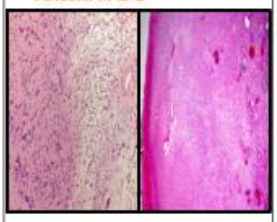
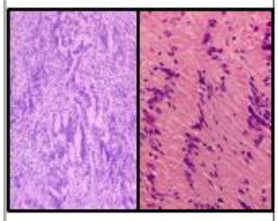
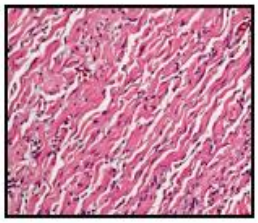
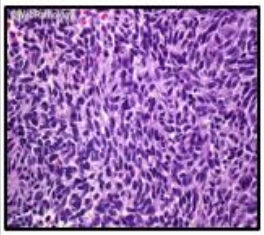
Patho 3

Disease	Feature	Lab	Sign & Symptoms	Histology & Microscopically	Other
Schwannomas	• Benign • Encapsulated • Occur in soft tissues, internal organs, or spinal nerve roots.	• Shwannoma : Antoni A & B  • Verocay bodies 	• Most commonly affected cranial nerveis the vestibular portion of the eighth nerve, symptoms nerve root related to , which compression .here hearing lossincludes	• *Grossly :* 1. Circumscribed masses abutting an adjacent nerve. • *Microscopically :* 1. Antoni A:dense areas, bland spindle cells arranged into intersecting fascicles, often align to produce nuclear → palisadingVerocay bodies:alternating bands of nuclear & .anuclear areas 2. Antoni B:loose areas, the spindle cells are spread apart by a prominent myxoid extracellular matrix. walled hyalinized -Thick vessels often are present 3. Axons are largely excluded.from the tumor 4. Hemorrhage or cystic changes.	• Most are sporadic • %10~ are associated with familial Neurofibromatosis type 2 (2(NF
Neurofibromas	• Benign • Not Encapsulated		• Can be localized cutaneous tumors, Diffuse or Plexiform	1. Neoplastic Schwann cells in neurofibroma are admixed with other cell types, mast cells, fibroblast like cells, & perineurial-like cells. 2. The backgroundstroma often containsloose .wavy collagen bundles	• Malignant Peripheral Nerve Sheath Tumors can arise from them)1NF(%50
Malignant Peripheral Nerve Sheath Tumors (MPNST)	• Malignant			• Highly cellular and exhibit features of overt malignancy ; 1. Anaplasia 2. necrosis 3. infiltrative growth pattern 4. Pleomorphism 5. high proliferative activity (mitoses).	• (50% NF)1 • May arise from transformation of a neurofibroma, (usually .of the plexiform type) • About one-half of such tumors arise in patients with NF) 10-3(% , 1of all patients with NF1 develop MPNST.

Disease	Incidence	Cause	Sign & Symptoms	Associated with
Familial Neurofibromatosis Type 1	• Most common • 1:3000	• **Autosomal dominant** • **Chr.17**	1. Pigmented nodules in iris)Lisch nodule) 2. Pigmented skin lesions)freckling & café-au-lait spots)	1. Neurofibromas 2. malignant peripheral nerve sheath tumors 3. optic gliomas
Familial Neurofibromatosis Type 2	• 1:40000	• **Autosomal dominant** • **Chr.22**	1. Hearing loss 2. vertigo 3. Multiple cranial nerve neuropathies.	1. Multiple schwannomas 2. meningiomas 3. ependymomas.