

Long-term Epilepsy-Associated Tumor

LEAT Tumor

- **Patient Demographics:** most commonly occur in children, adolescents, and young adults, with symptom onset typically in the first two decades of life.
- **Symptoms:** The hallmark symptom is chronic, often drug-resistant focal epilepsy. Other neurological symptoms are rare unless the tumor grows large.
- **Tumor Location:** have a strong predilection for the temporal lobe, but can occur elsewhere in the cortex.
- **Tumor Type:** Most are benign (WHO grade 1), slow-growing, and cortically based. They often show both neuronal and glial cell differentiation (mixed glioneuronal tumors)

Common Types

- Ganglioglioma (GG)
- Dysembryoplastic neuroepithelial tumor (DNET)
- Pilocytic astrocytoma (PA)
- Angiocentric glioma (AG)
- Other newly recognized entities
- Polymorphous low-grade neuroepithelial tumor of the young (PLNTY)
- Multilocular/vacuolating neuronal tumor (MVNT)

Common Types of LEAT Tumors:

Tumor Type	Characteristics
Ganglioglioma	Most common LEAT. Mixed neuronal and glial elements. Often calcified.
Dysembryoplastic Neuroepithelial Tumor (DNET)	Benign, cystic or multinodular. Characteristically associated with drug-resistant epilepsy.
Pleomorphic Xanthoastrocytoma (PXA)	Superficial, with cystic and solid components; often in young people with seizures.
Angiocentric glioma	Recently defined; slow-growing, often in the cerebral cortex; associated with seizures.
Papillary glioneuronal tumor (PGNT)	Rare, benign tumor with both glial and neuronal features.
Isomorphic astrocytoma	A low-grade glioma variant, rare and epilepsy-associated.