

## **Case Report: Unusual High-Grade Diffuse Leptomeningeal Glioneuronal Tumor Mimicking Tuberculous Meningitis in a Child from an Endemic Region**

### **ABSTRACT**

**Background:** Diffuse leptomeningeal glioneuronal tumor (DL-GNT) is a new entity described in the 2016 World Health Organization (WHO) classification of brain tumors. While DL-GNT is predominantly an indolent tumor that affects young boys, high-grade DL-GNT is unusual and seldom reported in children. **Case Presentation:** In this report, we describe the challenges and pitfalls associated with diagnosing this high-grade variant in a tuberculosis-endemic region. We highlight the importance of identifying non-typical imaging findings, i.e., non-enhancing cystic lesions with high T2 signal along the leptomeningeal surface, that may expedite the diagnosis of this condition. Histopathologic correlations with MR spectroscopy findings are also discussed. **Conclusion:** We provide the first clinical imaging report of utilizing MR spectroscopy to distinguish DL-GNT from tuberculosis with histopathologic correlation.