

Pineal germinoma diagnosis

J.Sales-Llopis

Neurosurgery Service, Alicante University General Hospital, Alicante Institute for Health and Biomedical Research (ISABIAL - FISABIO Foundation), Alicante, Spain.

Serum and cerebrospinal fluid biomarkers

[Pineal germinoma serum and cerebrospinal fluid biomarkers.](#)

Histology

Schmalisch et al.¹⁾ reported two cases of pineal germinoma with granulomatous reaction and found only 20 previously reported cases. These authors clearly illustrated the risk of pitfall in endoscopic biopsy: one of their patients was quite similar to Talamonti et al reported case²⁾ with the biopsy leading to the wrong diagnosis of [neurosarcoidosis](#), and germinoma becoming evident only when it progressed. Immunohistochemistry using CD117 and PLAP is usually highly sensitive for germinoma and should be considered in all granulomatous lesions of the cerebral midline^{3) 4)}.

CT

[Germinomas](#) typically demonstrate increased attenuation relative to [gray matter](#) on [CT](#) as well as a draped configuration with respect to the posterior third ventricle^{5) 6)}.

MRI

[Pineal germinoma magnetic resonance imaging.](#)

References

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