

Pineal region metastases

Intracranial metastases to the **pineal region** is considered rare especially in cases without widely spread systematic cancer or without presence of other metastatic lesions in the brain.

The real incidence of **pineal metastases** is not clear, studies have reported a prevalence of 0.4 to 3.8% in patients with metastatic solid tumors ¹⁾

Kawtharani et al. suggests that we should consider pineal region metastasis as part of our differential whenever we encounter patients with an isolated **pineal lesion**. Endoscopic third ventriculostomy can be a better treatment option to treat obstructive hydrocephalus caused by the lesion potentially avoiding peritoneal dissemination ²⁾

A 48-year-old female presented with headache and limitation of upward gaze. She had a history of total gastrectomy for gastric adenocarcinoma 2 years previously. Computed tomography with contrast medium and T1-weighted magnetic resonance (MR) imaging with gadolinium showed ring-like enhancement of a solitary mass in the pineal region with obstructive hydrocephalus. T2-weighted MR imaging showed the tumor as hypointense. This MR imaging finding complicated the preoperative diagnosis, but malignancy was suspected from the medical history. The tumor was subtotally resected via the occipital transtentorial approach with a rigid endoscope. Histological examination of the surgical specimen revealed adenocarcinoma cells with **extensive coagulative necrosis**, which might have contributed to the hypointensity on T2-weighted MR imaging. Correct diagnosis of metastatic adenocarcinoma based only on MR imaging may be difficult in such cases, but metastatic adenocarcinoma of the pineal region must be considered in the differential diagnosis of pineal tumors ³⁾.

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³⁾

Kanai H, Yamada K, Aihara N, Watanabe K. Pineal region metastasis appearing as hypointensity on T2-weighted magnetic resonance imaging-case report. Neurol Med Chir (Tokyo). 2000 May;40(5):283-6. doi: 10.2176/nmc.40.283. PMID: 11980097.

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