

# Spontaneous internal jugular vein thrombosis in rhabdomyosarcoma of the nasopharynx

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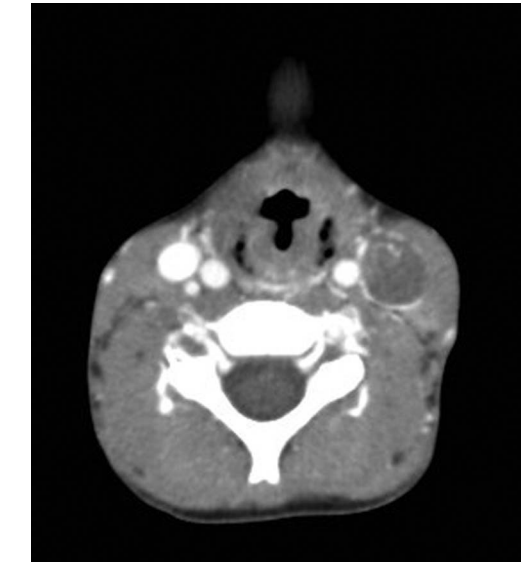
## DESCRIPTION

A 5-year-old child was referred to the ear, nose and throat team, with a left-sided quinsy following a 6-week history of progressive dysphagia and snoring. The child had been treated in the community with three courses of oral antibiotics, with minimal success. On presentation to hospital the child was afebrile and stertorous. Examination revealed a large left-sided oropharyngeal and soft palate swelling; there was no cervical lymphadenopathy. All inflammatory markers were within normal limits. A CT of the neck was requested for diagnosis of the mass.

Contrast-enhanced CT of the neck and thorax revealed a large (8.3×3.8×5.2 cm) soft tissue density in the postnasal space. There was erosion of the left side of the clivus and an almost complete occlusive thrombus in the left internal jugular vein (IJV) (figures 1 and 2).

Histology confirmed rhabdomyosarcoma, pre-treatment stage 2, T2b, N0, M0, which is responding well to neo-adjuvant chemoradiotherapy. Staging is determined by the tumour site, size and metastases. Parameningeal sites including the nasopharynx are at risk of extension to the skull base resulting in poor surgical access and a less favourable prognosis.<sup>1</sup> Spontaneous IJV thrombosis is described in malignancy and also in neck trauma from damage to the vessel.<sup>2</sup>

Figure 1 is an example of a skull base extension in a nasopharyngeal rhabdomyosarcoma, highlighting the complications of parameningeal lesions. IJV thrombosis, showing in figure 2, is a recognised complication of malignancy but has



**Figure 2** Contrast-enhanced axial CT scan of the neck showing the almost complete occlusive thrombus in the left internal jugular vein.

not been described in the literature in rhabdomyosarcoma.<sup>3</sup>

## Learning points

- ▶ Parameningeal rhabdomyosarcoma can extend to the skull base, impacting surgical accessibility and prognosis.
- ▶ Spontaneous internal jugular vein thrombosis is a potential complication of nasopharyngeal rhabdomyosarcoma.

**Contributors** MW identified the case and researched the relevant background information. The report was jointly written up and reviewed with SM.

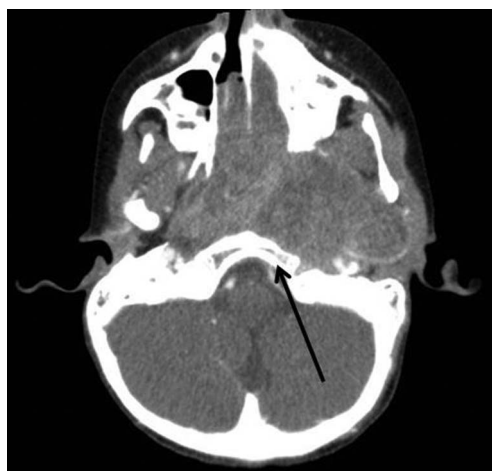
**Competing interests** None declared.

**Patient consent** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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**Figure 1** Contrast-enhanced axial CT scan of the neck showing extension of the mass into the skull base and erosion of the left clivus (arrow).



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