



## Research paper

# A five-year experience in endoscopic endonasal excision of juvenile nasopharyngeal angiofibroma

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## ABSTRACT

**Introduction:** Juvenile nasopharyngeal angiofibroma (JNA) is a histological benign but locally aggressive vascular tumour which can invade the base of skull.

**Aim:** This is a retrospective study with the aim to examine the outcome of patients with JNA and endoscopic endonasal excision of tumour at a tertiary center in Malaysia.

**Material and methods:** 9 patients were identified from the medical record office from 2015 to 2019. We review the data on patient demographics, clinical presentations, laboratory investigations, intraoperative blood loss and duration of hospital stay.

**Results and discussion:** 8 patients were male, 1 was female. The average age of diagnosis was 15 (range 11 to 29) years. The commonest chief complaint was recurrent epistaxis, followed by nasal obstruction and nasal discharge. Three patients were at stage I, 4 patients at stage II, 1 patient at stage III and 1 patient at stage IV based on Fisch classification. All patients underwent primary endoscopic endonasal excision of tumour with no vascular, ophthalmological or neurological complication. Seven patients had preoperative embolization done. Average operation time was 137 minutes (range 60–360 minutes). Intraoperative blood lost varied from 500 mL to 1300 mL (mean 777.7 mL). All patients were discharged well with no recurrence.

**Conclusions:** The management of JNA can be challenging. The current shift in management favouring endoscopic endonasal excision of JNA reduces postoperative morbidity. It is possible to be applied on all stages of tumour with good success rate.