# Paediatric laryngeal granular cell tumour

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## ABSTRACT

Granular cell tumour (GCT) affecting the larynx is not common, especially in children. Most cases are apt to be confused with respiratory papilloma and may even be mistaken for a malignant neoplasia. We present a case of laryngeal GCT in a 12-year-old child to emphasize that the tumour should be regarded in the differential of growths affecting the larynx in children.


**Key words:** Granular cell tumour, larynx, children

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## INTRODUCTION

Granular cell tumour (GCT), also known as granular cell myoblastoma, is a rare neoplasm of debatable origin; GCT is very rare in the larynx and even rarer in the paediatric age group. More than half of all cases occur in the oral cavity.[1] In this report, we present a case of laryngeal GCT in a 12-year-old Nigerian child to emphasize that although recurrent respiratory papilloma is the most common benign tumour of the larynx in childhood,[2] other not-so-common benign tumours are often encountered.

## CASE REPORT

A 12-year-old male patient was referred to the Ear, Nose and Throat Department from the Paediatric Medical Department with hoarseness of voice of 6 months duration and progressive respiratory difficulty with episodes of apnoiec attack at night. He had had treatment for chronic bronchitis and asthma without improvement.

Indirect laryngoscopy showed a greyish mass located at the glottic inlet, with no vocal cord involvement. A diagnosis of juvenile laryngeal papilloma was made. Anterio–posterior and lateral X-rays of the soft tissue of the neck showed a soft tissue mass occluding the laryngeal inlet. His haematological and biochemical parameters were within normal limits.

He underwent microlaryngoscopy and excision of the mass under general anaesthesia through a perioperative tracheostomy. At surgery, a grayish mass was located at the right vestibule in the supraglottic compactment encroaching on the right vocal cord. The vocal cord was normal. Postoperatively, the patient was weaned off the tracheostomy tube after 48 h and was discharged on the 5$^{th}$ day to be reviewed on an outpatient basis. The patient has remained asymptomatic for 10 months after microlaryngoscopy.

The histology report of the specimens showed tumour cells consisting of sheets of large, polygonal cells with pale granular, acidophilic cytoplasm, overlaid by stratified squamous epithelium and exhibiting marked pseudoepitheliomatous hyperplasia [Figure 1]. These features are consistent with GCT.

## DISCUSSION

Only a very few cases of GCT have been reported in the larynx.[1-4] GCTs are usually sessile, painless and somewhat firm, immovable polypoid nodules. Grossly, GCT may be confused with recurrent juvenile laryngeal papilloma (RJLP), except that the latter is often multiple and may grow to a considerable size, obstructing the

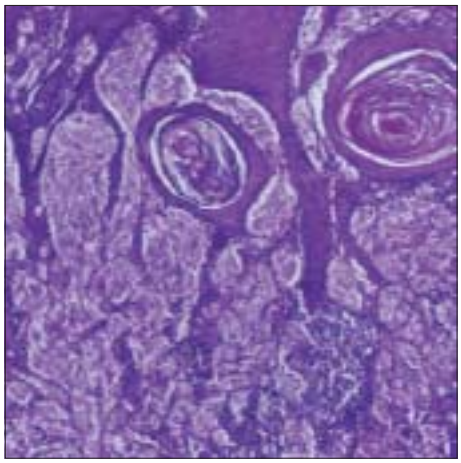


**Figure 1: Severe pseudopithelimatous hyperplasia in a granular cell tumor case (H & E, ×20)**

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larynx, and has a tendency to reoccur, necessitating repeated excisions.[1-5] RJLP also has a tendency to spread throughout the respiratory tract and exhibits a tendency for spontaneous remission.[2]

GCT, on the other hand, does not have the tendency to spread beyond the respiratory tract and has a less than 7% recurrence rate after excision.[5] A few reported metastasized GCTs have turned out to be histologically benign and, for this reason, tumours that recur, grow rapidly or reach a size greater than 5 cm should be examined with great care before concluding whether they are malignant or not.[5] This does not imply that GCT is always benign; recurrence, with increase in size, may be indicators of malignant transformation. GCT is amendable to surgical resection.

In conclusion, although juvenile laryngeal papilloma is the most common childhood benign laryngeal tumour, laryngeal GCT could occur in children and should be considered in the differential diagnoses of childhood laryngeal tumours.

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