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Case Report

A case series of laryngeal papilloma management in children

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ABSTRACT

Squamous papillomata caused by the human papillomavirus (HPV) are the most common benign neoplasms seen by laryngologists. I hereby presenting a case series of laryngeal papilloma in pediatric age with varied outcome following surgery. Microlaryngoscopy guided excision using cold steel instruments and cautery (if required) was the treatment of choice in our cases. Of the 2 cases one did not recur but the other 2 had recurrence who underwent second surgery with oral antivirals post operatively. Papilloma treatment should be individualized/ tailor made because recurrence rate varies.

Keywords: Laryngeal papilloma, Microlaryngoscopy, Antivirals, Recurrence

INTRODUCTION

The juvenile form, almost always a result of HPV type 6 or 11 and commonly designated papillomatosis because of diffuse involvement of the larynx, usually manifests in infancy or childhood as hoarseness and stridor.[1] This form of papillomatosis is often aggressive and rapidly recurrent, and it requires frequent laryngoscopic removal for management.[1] The carbon-dioxide laser remains the most widely accepted management for papillomata in the larynx.[1]

Systematic reviews of the English literature suggest that the strongest current interest might be in the antiviral agent cidofovir.[2-4] The purpose of this study is to evaluate whether every papilloma require antiviral medication or only selected cases, also the effect of oral antivirals on the outcome.

This study was conducted in the department of ENT at Vijayanagar Institute of Medical Sciences during the period of 2013-14. It is a case series involving 2 cases of laryngeal papilloma in children. Both cases were evaluated and after obtaining consent they were included into the study.

CASE REPORTS

Case 1

A 3 year male presented with hoarseness of voice since 1 year, no stridor, wheeze. He had underwent excision 7 months back (details not available) Laryngeal examination shows pink masses involving anterior part of vocal cord. Microscopic examination showed involvement of both vocal cord and extension into anterior subglottis, whole of it was removed and base was cauterized. Post operatively oral acyclovir was prescribed for 7 days. Histopathology was suggestive of juvenile laryngeal papilloma with HPV associated changes, maturation arrest and dyskeratosis. Patient had some voice change (improved) but no evidence of recurrence was noted on examination.

Case 2

A 5 year girl presented with hoarseness of voice since 3 months, laryngeal endoscopy shows polypoidal growth in anterior commissure and right vocal fold. Under microlaryngoscopy it was papilomatous lesion attached from anterior commissure extending onto vocal folds more towards right side and inferomedial surface of right vocal fold which was excised using cold steel instruments.

Histopathology demonstrates papilloma with fibro-vascular core lined by squamous epithelium showing acanthosis and mild atypia in basal layer. Orderly maturation of squamous epithelium is noted, subepithelium shows mild mononuclear inflammatory cell infiltration.

Postoperative follow up was 2 months later when she had mild hoarseness.

DISCUSSION

Respiratory papillomatosis is common in pediatric age group and so is the recurrence rate. In our study we noted that recurrence is not always true, each case needs tailored approach and treatment, as in case 1 which was aggressive it recurred but antiviral treatment was effective whereas case 2 didn't showed recurrence suggesting excision alone was sufficient.

Both the cases had persisting hoarseness but not growth suggests that surgery might have injured vocal fold which again proves that laser is better tool for excision without altering the voice outcomes.

The major drawback in this case series was few cases and follow up was for a short period only.

CONCLUSION

Respiratory papillomatosis is commonest cause of hoarseness in children, recurrence is the rule and multiple excision using laser remains gold standard treatment. Each case represents different course following surgery hence treatment should be tailor made rather than universal also long term follow up is required to measure the effectiveness of treatment modality used.

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