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INFLAMMATORY PSEUDOTUMOUR OF THE LARYNX: A CASE REPORT

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INTRODUCTION: Inflammatory Pseudotumour (IPT) is a benign proliferation of tissue but has a destructive potential of the affected area. It is also called Inflammatory Myofibroblastic tumour (IMT). Initially the tumour was reported in the lung but later on reported in other areas like abdomen, orbit etc. IPT of the larynx is a rare involvement.

Pathogenesis of inflammatory Pseudotumour remains controversial and treatment is under standardised. Pseudotumours of Larynx are reported more common in boys around the age of 10 yrs.

We report a case of IPT in a 11 yrs. old girl, who underwent surgery, with 1yr follow up.

CASE REPORT: An 11yrs. old female child presented with breathing difficulty of 2 weeks duration; inspiratory stridor and change in voice of recent onset. No other significant past, personal or family history.

Patient consulted in the ENT department and as a part of the investigations, a plain lateral radiograph of neck was taken.

Fig. 1: Plain lateral Radiograph of Neck

Plain lateral radiograph of neck revealed a radiopaque soft tissue mass in the subglottic location of larynx, projecting into the lumen with compromise of the laryngeal lumen. No calcification was seen.

Videolaryngoscopy was done showed a smooth reddish mass in the subglottis obstructing 80% of the airway—possibility of haemangioma was suggested.

For further characterisation of the lesion the child was send for CECT to our department in May 2014.

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Fig. 2: Plain and Contrast Ct Section of Larynx Below the Vocal Cord

Fig. 3: Plain and Contrast section of larynx at lower Subglottis

Plain and contrast axial section of Nasopharynx revealed a minimally enhancing soft tissue density lesion encircling the hypopharynx and larynx. Anteriorly the lesion is projecting into the

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laryngeal mass in the subglottic location with subglottic airway narrowing. Craniocaudally the lesion is extending from the level of C3 to C6 for a length of 7cms. Both aryepiglottic folds were thickened. By CECT a possibility of Lymphoma was given with a differential of Inflammatory Pseudo tumour or Hemangioma.

Child underwent tracheostomy with endoscopic laser excision of the mass in May 2014 and the specimen was sent for histopathology.

HPR with IHC was reported as inflammatory Pseudotumour.

DISCUSSION: Inflammatory Pseudo tumour (IPT) are usually diagnosed by histopathology and is considered when an inflammatory mass has inconclusive findings. Awareness of IPT developing in the head and neck region should be there.^{1,2} The diagnosis is by ruling out other causes. IPT can develop abruptly or as a chronic process.

IPT is usually seen in younger patients which appear as solid mesenchymal tumors occurring as solitary mass.¹ Lymphoplasmacytic infiltration occurs into a mass that develops from well differentiated myofibroblasts. IPT can develop anywhere in the body, lung being the most predominant site and larynx is a rare site.^{3,4} It is a fleshy well differentiated tumour and is hard to firm in consistency on palpation.

Radiologically, IPT appearance is highly variable and non specific due to high fibrous content and cellular infiltration. On USG, the lesion can be well defined or ill defined, hyper or hypoechoic mass,⁵ and will show increased vascularity on colour or power doppler.

On CT scan, IPT is a well defined or ill defined lesion with low, equal or high attenuation compared to adjacent soft tissue.^{5,6} IPT will show homogeneous or heterogeneous enhancement on post contrast study. Often there is a delayed enhancement of the lesion due to abundance of the fibrous tissue. Imaging characters of the lesion vary from person to person. Tracheobronchial and laryngeal IPT can present as a heterogeneous lobulated or exophytic endoluminal mass. Calcification may be present occasionally. Cases reported are more common in boys around the age of 10 yrs.⁷

Treatment is long term corticosteroids and open or endoscopic surgery is required if obstructive symptoms develop.⁸ Local recurrence has been reported. Potential malignant transformation is very rare. Overall prognosis is very good and favourable.

CONCLUSION: Inflammatory Pseudotumour of the larynx is very rare but carries a good prognosis even though local recurrence has been reported. It simulates malignant tumours like sarcomas. Radiologically it is non specific, but should be aware of this entity as a diagnostic consideration. IHC provides a definitive diagnosis. Management is with high dose steroids. Surgery is considered when obstructive symptom develops.

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