Introduction

Cystic hygroma is a lymphatic malformation which predominantly affects head and neck. It is a congenital multiloculated lymphatic lesion that can arise from anywhere, but classically found in the posterior triangle of the neck. Its clinical presentation differs according to the location and size of lesion.

Case Report

A 34 months old girl presented with complaint of left sided painful neck swelling for 1 week following an upper respiratory tract infection. It was associated with fever and no difficulty in breathing. Fever subsided with oral antibiotic but neck swelling persist. This was her second episode of similar neck swelling. The first episode was associated with impending airway obstruction, treated as infected left branchial cyst, which was drained. There was no stridor or respiratory distress.

Clinical examination showed a cystic swelling at left upper cervical region measuring 3x3cm with no external skin deformity. The cyst was not transilluminable. (Figure 1). The oropharyngeal examination showed hypertrophic tonsils.

Computed tomography of neck finding suggestive of retropharyngeal abscess, supported by raised in inflammatory markers (Figure 2 & 3).

She underwent retropharyngeal drainage and yield a straw coloured fluid. Fluid were negative for cultures and malignancy. Clinical condition improved after drainage of abscess. She was seen in clinic 1 month after the drainage, being completely asymptomatic and clinically without palpable neck mass. She defaulted the MRI and subsequent follow up.

Discussion

Cystic hygroma is a benign congenital lymphatic malformation. The incidence is 1/6000 live births. It predominantly affects the neck in 70-80% of cystic hygromat. 90% of cystic hygroma present by 2 year-old with only 50% present at birth. It has been associated with chromosomal anomalies such as Down syndrome and Turner syndrome as well as other congenital abnormalities such as cardiac defects.

Few cases of cystic hygroma has extension to retropharyngeal space presenting with upper airway obstruction and dysphagia. Rapid increment in size are contributed by inflammation following upper respiratory tract infection and haemorrhage into the cyst.

The 2 main modalities of treatment is by complete surgical excision and sclerotherapy. However, the former is more feasible if it confines only in superficial dermis. Sclerotherapy induces inflammation which result in resolution of cyst. Airway obstruction is the fearful complication from sclerotherapy besides the milder reaction that includes fever and local inflammation. There is also no clear superior treatment outcome between sclerotherapy and surgery. Conservative management can be reserved for asymptomatic patient. Other treatment options are aspiration, radiation, cryotherapy and cautery.

Imaging is needed for localization of cystic hygroma as it may lies in close proximity to major vessels and deep neck spaces that may cause concurrent laryngotracheal compression. Cystic hygroma is characterized as multiloculated hypodense mass on CT, whereas on MRI it demonstrates a low or intermediate signal intensity on T1WI and hyperintensity on T2WI.

The treatment modality should be designed on case by case basis after considering the overall benefit of the patient.

Conclusion

All neck cystic hygroma should be assessed for retropharyngeal or parapharyngeal extension despite a child does not appear to be in respiratory distress. An early surgical intervention is important to avoid possible risk of future airway compromise in cystic hygroma involving deep neck spaces.

References