Giant cystic hygroma of the neck with spontaneous rupture

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ABSTRACT

Cystic hygroma is a disfiguring benign lesion commonly observed in the neck and face regions of children. The common complications of these malformations are respiratory obstruction, dysphagia, infection, and hemorrhage. Here, we present an uncommon complication of spontaneous rupture of a cystic hygroma. A two-day-old male baby presented with a swelling that was cystic, non-compressible, non-pulsatile and the transillumination was negative. With a clinical diagnosis of a massive cystic hygroma of the neck, CT scan was performed that demonstrated a large multiloculated cystic lesion. On the second day after admission, the swelling burst spontaneously with drainage of about 1000 ml of hemorrhagic fluid. The swelling shrunk considerably after that. The patient underwent surgical excision of the lesion and had an uneventful postoperative recovery. The histopathological examination confirmed the diagnosis of cystic hygroma.

KEY WORDS: Cystic hygroma, spontaneous rupture

INTRODUCTION

Cystic hygroma is a disfiguring benign lesion commonly seen in the neck and face regions in children. The other common locations are the mediastenum, retroperitoneum, pelvis, and groin. The common complications of these malformations are respiratory obstruction, dysphagia, infection, and hemorrhage.[1] Hemorrhage into the cyst and nerve compression can cause paresthesia and pain. Here, we present an uncommon complication of spontaneous rupture of a cystic hygroma.

CASE REPORT

A two-day-old male baby, born by full-term normal vaginal delivery at home presented with a massive swelling on the left side of the neck since birth which was observed to increase in size. On examination, there was a massive swelling of about 35 cm × 30 cm in size on the left side of the neck [Figure 1]. A small 1 cm × 1 cm superficial ulcer was present over the most dependant part of the swelling. The swelling was cystic, non-compressible, non-pulsatile and the transillumination was negative. There were no other congenital anomalies. A clinical diagnosis of a massive cystic hygroma of the neck with hemorrhage in the lesion was made.

A CT scan demonstrated a large multiloculated cystic lesion with internal echoes involving the neck, extending up to occipital region superficial to the paraspinal muscle. It was reaching the midline posterior to the left thyroid lobe and the trachea into the tracheoesophageal groove and was abutting the left common carotid artery. The inferior part of the lesion was reaching the thoracic inlet. A fine needle aspiration cytology showed numerous hemosiderin laden macrophages and blood. The possibility of a vascular hamartoma was suggested.

On the second day after admission, the swelling burst spontaneously with drainage of about 1000 ml of
hemorrhagic fluid. The swelling shrunk considerably after that but the child did not show any hemodynamic instability [Figure 2]. The patient underwent surgical excision of the lesion and had an uneventful postoperative recovery. The histopathological examination confirmed the diagnosis of cystic hygroma.

**DISCUSSION**

Cystic hygromas are believed to be the result of maldevelopment of the lymphatic juglar sacs. Clinically, they occur as large, soft, cystic masses with dilatation of the associated anatomic area. The diagnosis is usually made by physical examination. Transillumination can help to differentiate cystic hygromas from other solid masses. However, bleeding into a lymphangioma can cause confusion with a hemangioma; this occurred in our case. Most probably, the bleeding was due to trauma in the birth canal during the process of childbirth.

Appropriate management of cervical cystic hygroma requires a prenatal US diagnosis, which has important implications in its management. These lesions are associated with chromosomal abnormalities, and hence, amniocentesis with chromosomal analysis should be performed with subsequent genetic and family counseling. Airway compromise at birth can also be anticipated with giant neck masses. Intrauterine sclerotherapy can be performed to reduce the size of the lesion. MRI scan may provide useful information about the anatomy of the neck mass and the adjacent airway for the selection of ex utero intrapartum treatment procedure.

**REFERENCES**


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