A case of cystic hygroma of the chest

This report describes the case of a male infant who presented with a mass on the chest wall. The mass was soft, non-tender and transilluminating. An ultrasound scan revealed a multiseptate, thin-walled cystic mass, consistent with a diagnosis of cystic hygroma.

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Keywords

cystic hygroma; cystic lymphangioma; dysmorphism

Key points

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1. Cystic hygroma is a relatively benign condition that can cause considerable anxiety to parents and professionals, especially where antenatal scans have been reported as normal.
2. Examination and ultrasound findings are characteristic and should lead to a prompt diagnosis and appropriate management.
3. Thought should be given to a possible underlying chromosomal disorder and any potential complications that may arise due to the site and size of the mass.

A baby of 37 weeks' gestation was born by normal delivery to a primigravida mother with no significant medical history. The antenatal screening had revealed no abnormalities. On delivery he was noted to have a cystic mass on the left lateral chest wall measuring 9x9x6cm (**FIGURE 1**). The mass was noted to be soft, non-tender and transilluminating (**FIGURE 2**). There was no bruit heard on auscultation. The rest of the physical examination was normal. Ultrasound showed a multiseptate, thin-walled cystic mass, consistent with a diagnosis of cystic hygroma. Chromosomal karyotyping revealed a normal 46XY appearance.

The child went on to have uncomplicated surgical removal of the mass at one year of age.

Discussion

Cystic hygromas (also known as cystic lymphangiomas) are benign, painless loculated lymphatic proliferations, which occur due to lack of development of the normal connections between venous and lymphatic drainage[1]. The Greek word hygroma means 'moist tumour'. The majority are congenital, being evident at birth (50-65%) or within the first two years of life (90%)[2], however rare adult-onset cases have been described in the literature[3].

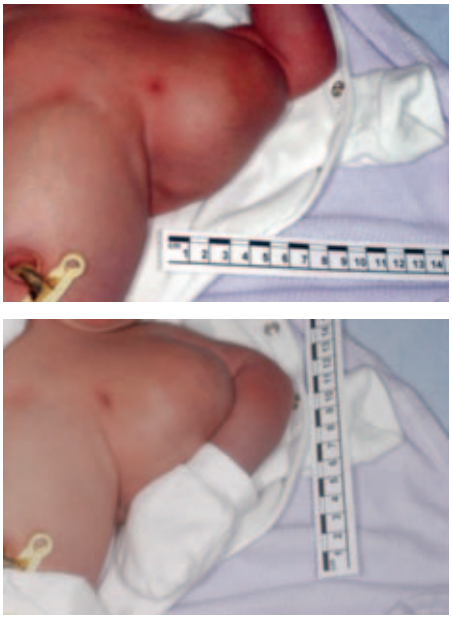

FIGURE 1 A cystic mass on the left lateral chest wall.

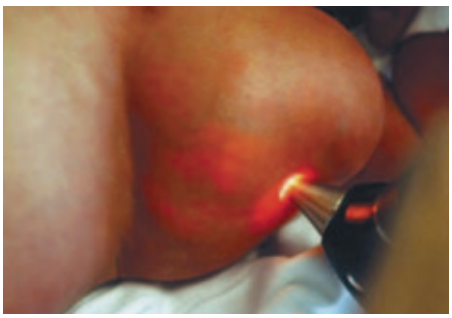

FIGURE 2 Transillumination can help to differentiate cystic hygromas from other types of solid mass.

The incidence of congenital cystic hygroma is said to be 1/6000 live births[4]. Hygromas diagnosed on antenatal scan have historically been associated with poorer prognosis (usually due to development of hydrops), although a recent study suggested that up 42% of these may resolve spontaneously by birth[5]. A significant proportion of patients will have a chromosomal disorder, with up to 60% having a diagnosis of Turner syndrome[6].

Cystic hygromas may theoretically develop at any site during embryonic lymphatic development, however the most common sites include the posterior neck (75%) and axilla (20%)[7]. Less frequently reported areas include the mediastinum, retroperitoneum, abdominal viscera, groin, bones and scrotum[7].

Complications of cystic hygromas include bleeding into the cyst, infections (usually due to seeding from respiratory or other infections) and abscess formation. In these situations, transillumination may be lost and the hygroma will become tense

and often tender[8]. Mechanical obstruction of the airway and dysphagia may occur for those sited in the neck[4,8].

Surgical excision remains the mainstay of treatment for cystic hygromas. Surgery is electively conducted (with CT scan or MRI), except if life-threatening complications are present. It is not without risk as nerves, arteries, veins and pleura (depending on site) are often found in close proximity. Recurrences can occur despite presumed total excision. Alternatives to surgery include injecting sclerosing agents, such as bleomycin, directly into the mass and the use of laser therapy[9,10].

References

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Cystic hygroma or cystic lymphangioma is a congenital malformation of lymphatic origin. Their occurrence on the chest wall is very rare, and they progressively grow with age infiltrating into the local tissues, around muscle fibers and nerves, making them difficult and hazardous to remove. There are various treatment modalities of such lesion. Based on the literature surgical excision is the preferred treatment of choice in cystic hygroma because it gives a better cure rate compared to other modalities. We report a case successful excision of anterolateral chest wall cystic hygroma in a teenager in Hospital Serdang. Discover the world's research. 20+ million members. Cystic hygroma is a large lymph containing cyst in cervico-facial regions so itâ€™s been an anesthestic challenge for airway management. Lyphangiomas are classified as capillary, cavernous and cystic lymphangiomas and based on the size of the cyst contained as microcystic,macrocystic and mixed [1-3]. The proposed mechanism for pathophysiology of cystic hygroma is these lesions are believed to originate from sequestration of lymphatic tissue from lymphatic sac during development of lymphatico-venous sacs. The sequestrated tissue fails to communicate with remainder of lymphatic or venous system an... The authors report a case of cystic hygroma of the chest wall in a male infant 2 months of age that was successfully treated with surgical excision in one stage. The diagnosis was made by physical examination with transillumination and by its typical sonographic pattern. The diagnosis was confirmed by histopathological examination and there is no evidence of recurrence after 24 months of follow-up. A review of the literature, updating the embryology, classification, and treatment of the disease, is also presented. Â© Williams & Wilkins 1996. All Rights Reserved. Source. Cystic Hygroma of the Chest Wall: A Rare Condition. Annals of Plastic Surgery37(2):211-213, August 1996. Full-Size. A cystic hygroma - or lymphangioma - is a birth defect which can be treated. Treatment involves surgical removal of the abnormal tissue.Â A cystic hygroma - or lymphangioma - is a birth defect that appears as a sac-like structure with a thin wall that most commonly occurs in the head and neck area of an infant. As the baby grows in the womb, it can develop from pieces of material that carries fluid and white blood cells. Such material is called embryonic lymphatic tissue. After birth, a cystic hygroma usually looks like a soft bulge under the skin. Symptoms. A common symptom is a neck mass found at birth, or discovered later in an infant after an upper respiratory tract infection. Diagnosis. Diagnosis is made by physical examination, and possibly: Chest x-ray. Ultrasound.