

# Axillary cystic hygroma

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Received : 05-03-04 Review completed : 11-03-04 Accepted : 26-04-04 PubMed ID : 15377810 J Postgrad Med 2004;50:215-6 30-year-old woman was referred at 35 weeks of pregnancy after sonological detection of a cystic mass in the foetal chest. A foetal ultrasonography carried out at our institution, showed a large multi-loculated mass in the right axilla that measured 9 X 7 cm and extended to the right chest wall (Figure 1). The mass did not light up on colour Doppler examination and hence a diagnosis of cystic hygroma was made. The right arm was extended over the mass and no other foetal anomalies were found. The foetal biparietal diameter, femur length and abdominal circumference corresponded with the gestational age of 35 weeks. In view of the potential for shoulder dystocia and obstructed labour, the baby was delivered by an elective Caesarean section at 37 weeks of gestation. The female infant weighing 2710 g did not require any assistance at birth. Clinically, she was noted to have a soft cystic, brilliantly transilluminant axillary mass measuring 14 X 10 cm and extending to the right anterior chest wall (Figure 2). No other anomalies were noted. The chest radiograph did not show any abnormality. Since the baby was asymptomatic, it was decided that sclerosant therapy be administered at 3 months of age.

#### Discussion

Cystic hygroma is a benign congenital malformation of the lymphatic system that has its genesis in

the lack of development of communication between the lymphatic and venous systems. The cyst may be unilocular or multilocular and could be of variable size but is characteristically brilliantly transilluminant. Eighty per cent of cystic hygromas occur in the neck, usually in the posterior cervical triangle. Other sites include the axilla, superior mediastinum, mesentery, retroperitoneal region, pelvis and lower limbs. Cystic hygromas may be associated with Turner syndrome, Noonan syndrome, trisomies, cardiac anomalies and foetal hydrops. Complications include infection, bleeding and airway compromise.

Foetal axillary cystic hygromas have been reported rarely<sup>2</sup> and usually as a sonographic finding in mid-gestation.<sup>3</sup> On an ultrasonological scan it appears as a hypo-echogenic multilocular cystic mass with septa of variable thickness. Scanning along the longitudinal axis of the humerus helps to identify the cystic mass easily. Unlike haemangioma, a cystic hygroma fails to light up on colour Doppler examination. Other differential diagnoses include high thoracic meningomyelocoele, and limb-body wall complex which is a complex mass of eviscerated organs. Magnetic resonance imaging permits better tissue char-

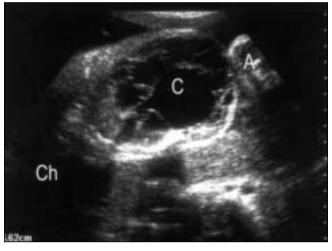


Figure 1: Ultrasonography showing a large multiseptate cystic mass(C)in the right axilla (Ch=chest, A=arm)



Figure 2: Large soft transilluminant cystic mass in the right axilla and chest wall

acterisation and provides a better estimate of tumour extent. Considering its association with several chromosomal anomalies, determination of foetal karyotype may be undertaken for providing accurate diagnosis and genetic counselling. Sonological evaluation should also be undertaken for the detection of foetal skin oedema, ascites, pleural and pericardial effusions and cardiac or renal anomalies. Repeat sonological evaluations may be necessary for the evaluation of the tumour growth. As cystic hygromas are known to lead to obstructed labour, and neonatal asphyxia, an elective Caesarean section should be considered as the preferred mode of delivery. These babies should be delivered at centres equipped to offer emergency neonatal ventilatory care.

As these tumours do not resolve spontaneously, surgical excision of the tumour and affected tissues should be undertaken. Infiltration of vital structures makes surgical excision difficult. Recurrences are known to occur even after presumed total surgical excision. Sclerosing agents like Bleomycin and OK-432 (inactivated streptococcal organisms) can be injected directly

into the mass for achieving the objective of excision without subjecting the infant to surgery.

Antenatal diagnosis of foetal cystic hygroma helps in planning a better anticipatory care (elective Caesarean section, conducting delivery in a well-equipped centre and undertaking investigations for the diagnosis of other associated congenital anomalies and chromosomal abnormalities). Interestingly, a recent report describes the intra-uterine management of foetal cystic hygroma using injection of OK-432.<sup>5</sup>

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## A patient's opinion is often valuable

number of incidents during residency shape our method of practice in future. This communication is regarding an event that had a significant bearing on the way I deal with patients. The incident occurred in the first year of my residency in Neurology at a tertiary care centre. A 35-year-old lady consulted me for headache of six years' duration. It was described as a constant dull ache and had all the features suggestive of tension headache. A thorough clinical examination including blood pressure and optic fundi was normal. I reassured the patient and decided to start her on tricyclic antidepressants. The patient enquired how sure I was that she did not have a brain disease. With the enthusiasm and exuberance of youth, I told her I was pretty confident. I had almost forgotten this incident when she revisited me four months later. This time she had brought a computerized tomography scan of her brain that showed multiple cystic lesions. I could not believe my eyes. My confidence was shattered. However, the patient and her family were kind to me and emphasised that anyone could make a mistake. She was operated at our institute and made a complete recovery. As we have a common ward for Neurology and Neurosurgery, I happened to see her almost on

a daily basis during the period she was admitted. Each meeting with her reminded me that her initial suggestion (that she might have a brain disease) was correct.

This incident had a major impact on my response to patients' opinions. As patients know their body (and disease) the best, it often helps to carefully listen to them. I have since made a number of diagnoses by just paying attention to what they say. It is very true that 'patients are our best teachers.'

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