Spontaneous regression of a cystic hygroma
A Case Report

Rodrigues, Joana[1]; Martins, Ana Rita[1]; Coutinho, Ana Luísa[1]; Hauwaert, Roxane[1] ; Mourinha, Vera[1]; Almeida, Diana[1]; Ferreira, Ângela[1]

[1] Centro Hospitalar Universitário do Algarve - Unidade de Faro, Portugal

Objetives

Cystic hygroma is a venolymphatic malformation due to the accumulation of liquid in the cervical region. It is frequently associated with aneuploidy or with other abnormalities, in particular cardiac defects. We describe the evolution of a pregnancy with a prenatal diagnosis of a cystic hygroma.

Methods

Healthy pregnant women, first pregnancy, was referred at 12 weeks and 5 days due to high risk for aneuploidy (trisomy 13, 18 and 21) in the first trimester screening and increased nuchal translucency (7.47 mm). A chorionic villous sampling was performed. At 22 weeks and 2 days, the second trimester ultrasound revealed, in the occipital region, the presence of a septated cystic hygroma with 37 x 17 x 28 mm *(Figure* 1). Subsequent management included a fetal MRI, fetal echocardiogram and ultrasound reassessments.

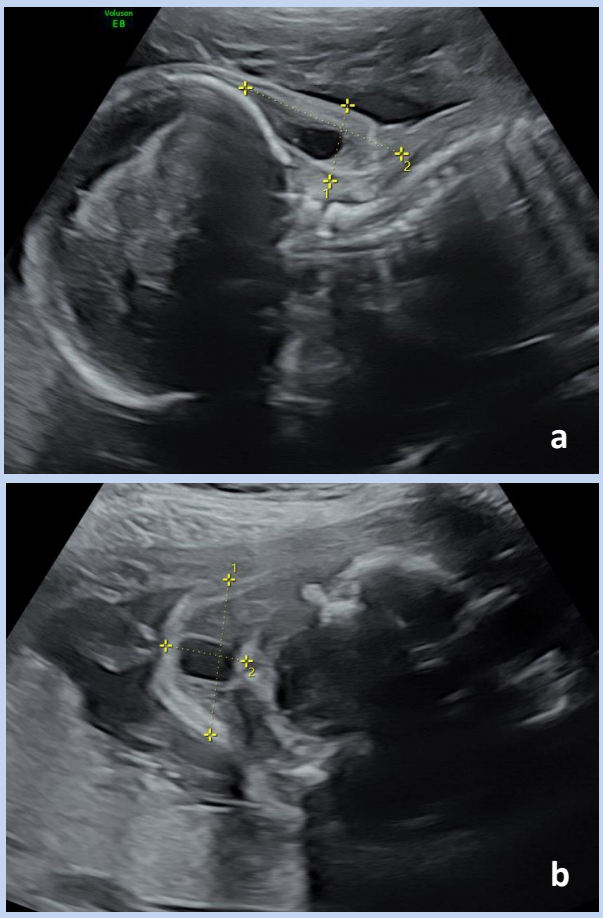

Figure 1. Septated cystic hygroma in the second trimester ultrasound (a) longitudinal view; (b) transverse view

Results

Fetal MRI, at 24 weeks, confirmed the diagnosis and excluded the presence of other lymphatic malformations or compression of adjacent structures. Genetic tests were normal, including microarray and rasopathies. The fetal echocardiogram was also normal. At 30 weeks, ultrasound revelead only increased nuchal fold (*Figure 2*). Subsequent ultrasound assessments, the last one at 36 weeks, did not identify cystic hygroma and the thickness of the nuchal fold was progressively smaller. Delivery happenned at 37 weeks by cesarean section for breech presentation in labour. Newborn, male, Apgar score 10/10/10 did not show any change on physical exam, with the exception of congenital torticollis on the right side. Newborn was discharged on the third day of life.

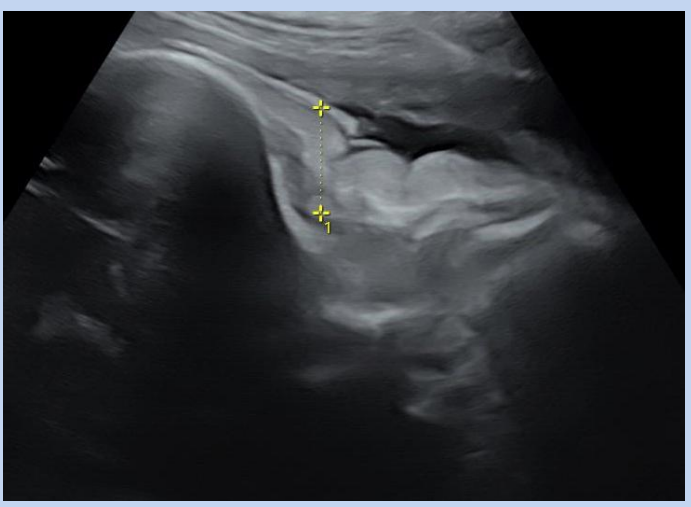

Figure 2. Increased nuchal fold at 30 weeks of gestation

CONCLUSIONS: The genetic counselling and exclusion of other fetal malformations are important to evaluate the prognosis, after the prenatal diagnosis of cystic hygroma. Spontaneous resolution during pregnancy is possible and is more common with euploid fetus without other malformations. Despite the poor prognosis associated with so high nuchal translucency measures, good outcomes are not impossible.

References: (1) Ganapathy R, Guven M, Sethna F, Vivekananda U, Thilaganathan B. Natural history and outcome of prenatally diagnosed cystic hygroma. Prenat Diagn. 2004 Dec 15;24(12):965-8. (2) Chen YN, Chen CP, Lin CJ, Chen SW. Prenatal Ultrasound Evaluation and Outcome of Pregnancy with Fetal Cystic Hygromas and Lymphangiomas. J Med Ultrasound. 2017 Jan-Mar;25(1):12-15