Pediatric Oncall Journal
Volume : 22, Issue 3:162-163
DOI: https://doi.org/10.7199/ped.oncall.2025.36

PEDIATRIC ONCALL
CHILD HEALTH CARE

IMAGES IN CLINICAL PRACTICE

CYSTIC HYGROMA

M.C.G. Karunanayake[1], Mudra J. Shah[2].

[1]Consultant Paediatrician, Armadale Health Service, Armadale, Western Australia,
[2]Paediatric Registrar, Perth Children hospital, Nedlands, Western Australia.

KEYWORDS
Cystic hygroma, Neonate, Treatment, Genetics.

ARTICLE HISTORY
Received 11 July 2024
Accepted 16 August 2024

A male neonate who had normal anatomy scan at 22 weeks of gestation, born at 35 weeks and 2 days of gestation by spontaneous vaginal delivery. Mum had gestational diabetes which was controlled by diet. Baby delivered in good condition. APGAR score was 9 at one minute and 9 at 5 minutes. His birth weight was 2590 grams. Large 11 cm X 10 cm in size, fluctuant, compressible, nonpainful, well transilluminate lump was detected on left chest wall at birth (Figure 1). Septations within the mass was detected during transillumination (Figure 2). Overlying skin was normal and there was no bruit. Systemic examination of the newborn was normal. There was no dysmorphism.

Figure 1. Cystic, nonpainful, compressible mass on left chest wall.



What is the diagnosis?

Cystic hygroma is one of the commonest benign lymphatic malformation in neonates[1], also classified as macro-cystic lymphatic malformation. Most of the cases (60%) present at birth and around 90% present by 2 years of age.[2] Reported incidence is around 1:6000 to 16000 live births. They are more commonly seen in cervical (75%-90%) and axillary (20%) regions. Chest lesions are rare.[3] Transillumination is a helpful bedside technique to differentiate it clinically from

Figure 2. Transilluminable mass with clearly visible septations.



other common masses like lipomas, teratomas and haemangiomas.[4] Ultrasound scans and magnetic resonance imaging (MRI) can be used to assess the extent and depth of lesions more accurately. Cystic hygromas around the neck can cause complications due to obstruction and displacement of the airways. Delivery in a tertiary care centre is recommended for such lesions. Chest wall lesions on the other hand generally do not cause problems. Cystic hygromas can be associated with some genetic conditions such as Turner syndrome, Trisomies and Noonan syndrome.[4] Therefore careful clinical examination and evaluation of the neonate is recommended. Treatment of cystic hygroma is dependent on the size, area involved and presence of complications. Smaller asymptomatic lesions can be managed conservatively. While sclerotherapy and surgical excision remained as treatments of choice medical treatment with Rapamycin (Sirolimus) is also available, especially for refractory cases.[5]

Compliance with ethical standards

Funding: None
Conflict of Interest: None

References:

1. Damaskos C, Garmpis N, Manousi M, Garmpi A, Margonis GA, Spartalis E, Doula C, Michail-Strantzia C, Patelis N, Schizas D, Arkoumanis PT, Andreatos N, Tsourouflis G, Zavras N, Markatos K, Kontzoglou K, Antoniou EA.

Address for Correspondance: M.C.G Karunanayake, Armadale health service, 3056 Albany Highway, Mount Nasura ,WA, 6112.
Email: mcgayathri@yahoo.com

©2025 Pediatric Oncall

Cystic hygroma of the neck: single center experience and literature review. Eur Rev Med Pharmacol Sci. 2017 Nov;21(21):4918-4923.

2. Bilal Mirza, Lubna Ijaz, Muhammad Saleem, Muhammad Sharif,Afzal Sheikh.Cystic Hygroma: An over view. Journal of cutaneous and aesthetic surgery 2010 Sep ;3(:3)139-144.
3. Osman Temizkan,Faruk Abike,Habibe Ayvaci, et all. Fetal axillary cystic hygroma: a case report and review RareTumors.2011Oct21;3(4):e39.
4. Fong-Cheng Ho,Hsiu-Lin Chen,Hao-Wie Chung. Axillary cystic Hygroma .The Journal of Paediatrics. 2021 Jul:234:273-274.
5. Haya Azouz,Haneen Salah,Saad Al-Ajlan ,et all. Treatment of cystic hygroma in a young infant through multidisciplinary approach involving sirolimus, sclerotherapy and debulking surgery .JAAD 2016July;2(4):350-353.