



## Infected Congenital Cystic Hygroma

Moshe Nussinovitch MD<sup>1</sup>, Sylvia Grozovski MD<sup>2</sup>, Benjamin Volovitz MD<sup>1</sup> and Jacob Amir MD<sup>1</sup>

Departments of <sup>1</sup>Pediatrics C and <sup>2</sup>Radiology, Schneider Children's Medical Center of Israel, Petah Tiqva, and Sackler Faculty of Medicine, Tel Aviv University, Israel

IMAJ 2001;3:545



A 20 day old infant was referred to the emergency room for evaluation of a large infected mass located on his back. The mass was apparent at birth and rapidly enlarged during the early weeks of life [Figure A].

On admission, his temperature was 38.5°C, white blood cell count 17,000/mm<sup>3</sup> (80% neutrophils), and erythrocyte sedimentation rate 60 mm/hr. Ultrasound demonstrated a cystic multi-septated nature of the mass [Figure B]. The infant was initially treated with intravenous ampicillin, cloxacillin and gentamicin without any significant improvement. After a week, treatment was switched to vancomycin and ceftazidime for 3 weeks, and his condition steadily improved. Surgical excision was the treatment of choice. The postoperative course was uneventful. The diagnosis was infected congenital cystic hygroma.

Cystic hygroma occurs as a result of sequestration or obstruction of developing lymph vessels. Although the lesion

can occur anywhere, the common sites are in the neck posterior to the sternocleidomastoid muscle, axilla, groin and mediastinum [1–5]. The cysts are lined by endothelium and filled with lymph. The mass may be apparent at birth or may appear and enlarge rapidly in the early weeks of life as lymph accumulates. Occasionally cystic hygromas contain nests of vascular tissue. Infection within the cyst is usually caused by *Streptococcus* or *Staphylococcus* [1,4] Sonographically, cystic hygromas usually appear sonolucent and multi-cystic or multi-septated. Sonography is useful in first identifying and categorizing the cystic hygroma, but magnetic resonance imaging is best for defining its geographic limits [1–3].

Excision is the treatment of choice for these lesions and the only effective treatment available [1]. Delay is unwarranted due to infection and progressive growth, with extension into previously uninvolved areas [1,2].

## References

1. Frigoletto FD, Jr, Birnholz JC, Driscoll SG, Finberg HJ. Ultrasound diagnosis of cystic hygroma. *Am J Obstet Gynecol* 1980; 136:962–4.
2. Hilliard RI, McKenobey JBJ, Phillips MJ. Congenital abnormalities of the lymphatic system: a new clinical classification. *Paediatrics* 1990;86:988–92.
3. Ninh TN, Ninh TX. Cystic hygroma in children: a report of 126 cases. *J Pediatr Surg* 1974;9:2–5.
4. Perkes EA, Haller JO, Kassner EG, Wolf E, Veleck FD. Mediastinal cystic hygroma in infants. *Clin Pediatr* 1979; 18:168–70.
5. Wunderbaldinger P, Paya K, Partik B, Turtschek K, Hormann M, Horcher E. CT and MR imaging of generalized cystic lymphangiomatosis in patients. *AJR* 2000;174:827–32.

**Correspondence:** Dr. M. Nussinovitch, Dept. of Pediatrics C, Schneider Children's Medical Center of Israel, Petah Tiqva 49100, Israel. Phone: (972-3) 925-3700, Fax: (972-3) 925-3801, email: moshen@post.tau.ac.il