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Answers to Medical Quiz

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A1. Right-sided swelling is occupying posterior triangle. The skin overlying the swelling is normal.

A2. The MRI is showing a large cystic lesion with septations.

A3. The diagnosis is right cervical cystic hygroma.

DISCUSSION

Cystic hygroma (also known as cystic lymphangioma) is a congenital multiloculated benign lymphatic lesion, which could arise anywhere in the lymphatic system, but is commonly found in the posterior triangle of the neck[1]. Cystic hygroma contains large or small cyst-like cavities containing lymph[1].

Three types of cystic hygroma are found; the type is based on the size of the cyst, macrocystic lymphangioma (large cysts >2 cm), microcystic lymphangioma (small cysts <2 cm) and mixed (macrocystic and microcystic lymphangioma)[1,2].

Hygromas are believed to originate in the embryo from sequestration of lymphatic tissue from lymphatic sacs[2]. Most cystic hygromas are found at birth as neck swelling, but some may appear few weeks after birth[3-5].

The most common symptoms of cystic hygroma include a swelling in the mouth, neck, cheek or tongue; the location of cystic hygromas in 80% is cervico-facial region, but can be found anywhere in the body. Swallowing and breathing may be affected in case of large cystic hygroma. The usual characteristic clinical feature of cystic hygroma at birth is a painless soft, compressible, non-tender, transluminant mass without any bruit. Complications could be respiratory distress, feeding difficulty and infection in the hygroma lesion[6,7].

In case of prenatal diagnosis of cystic hygroma, the type of delivery will be decided depending on the size and location of hygroma. If cystic hygroma is large, a cesarean section might be required, close observation and monitoring for airway obstruction is important[6,7].

The standard treatment of cystic hygroma is surgical excision in selected cases. Complete excision has been estimated to be possible in 40% of cases. The reason for incomplete excision of these cysts is microcystic lesion adherent to vital organ or blood vessel[6,7].

Sclerosing agent using intra-lesional Bleomycin is another treatment modality, which has been tried with good response. The other agent used as sclerosant is OK432 (lyophilized incubation mixture of group A streptococcus pyogenes of human origin), which has satisfactory results and less complications compared to Bleomycin. The other techniques

recently introduced in the management of lymphangiomas are radio-frequency ablation and laser excision of the lymphangiomas with promising results[8].

CONCLUSION

Cervical cystic hygroma is a benign congenital lymphatic disorder. This lesion composed of macrocystic malformations or microcystic malformations or both. The diagnosis is based on clinical examination after birth with ultrasound or MRI. Surgical excision is the treatment of choice in cases of single, large and superficial cyst. Sclerosing agents are suitable options in cases of multiple microcystic and deep-seated hygroma or if surgery is contraindicated. The outcome is related directly to the extent of the cystic hygroma and the complete removal of the cyst wall.

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