Case Report: A Complication of Acetic Acid Sclerotherapy for Lymphatic Malformation

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ABSTRACT

Lymphatic malformations (LMs), previously referred to as lymphangiomas or cystic hygromas, are vascular malformations comprised of benign cystic masses derived from abnormally developed lymphatic channels. 75% of all LMs are found in the head and neck, and though they are benign, LMs are infiltrative into surrounding structures irrespective of tissue planes.1-3 LMs are further classified as either microcystic (numerous small cysts < 2 cm3) or macrocystic (cystic spaces > 2 cm3).1, 2 Acute complications with acetic acid have been reported, with severe cases leading to life-threatening complications requiring multiple surgical interventions.2

INTRODUCTION

Lymphatic malformations (LMs) are vascular malformations composed of benign cystic masses derived from abnormally developed lymphatic channels. They are typically found in the head and neck region, where they can be highly infiltrative and difficult to manage surgically. Acetic acid sclerotherapy is a common method used for treating LMs, but it can have serious side effects.

CASE PRESENTATION

NB is a 13-year-old girl who was diagnosed with an asymptomatic right neck stage III macrocystic lymphatic malformation in May 2010. In June 2011, the patient presented to the emergency room with an acute infection of the lesion. She was admitted to the pediatric ICU for airway monitoring and was treated with IV antibiotics. The patient did not develop airway compromise, the infection improved, and she was discharged home.

On post-operative day 3, the patient developed acute bleeding from the oral cavity and right neck swelling. She was emergently brought back to the operating room where active bleeding from the right lingual artery was noted. The lesion was treated and the patient was discharged home on post-operative day 5.

DISCUSSION

Vascular anomalies were clearly defined into classifications based on cellular turnover and histology by Mulliken and Young in 1985.5 LMs are vascular anomalies that are categorized as either vascular tumors (hemangiomas) or as vascular malformations (capillary, venous, lymphatic, arteriovenous, and combined lesions).1, 6, 7 Lymphatic malformations (LMs) are further classified as either microcystic (numerous small cysts < 2 cm3) or macrocystic (cystic spaces > 2 cm3).1, 2 Acute complications with acetic acid have been reported, with severe cases leading to life-threatening complications requiring multiple surgical interventions.2

REFERENCES

1 In a review by Acevedo et al. in 2008 of 22 articles and 2 conference proceedings. In their analysis major complications were rare including one case of intracystic hemorrhage, 3 cases of airway obstruction, and one death from pneumonia in a patient treated with bleomycin.