Giant Tongue Hemangioma

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Abstract

Hemangiomas are benign tumors of infancy and childhood. These tumors are mostly in the neck and head region and occur more commonly in the palate, lips, and tongue. In this case report, we report a case of hemangioma of the body of the tongue, discussing the diagnostic aspects and treatment. A giant tumor malformation of the tongue diagnosed prenatally after birth proved to be a large hemangioma. He required multiple surgeries until the mouth could be closed and the child could eat well and look normal.

Keywords: Tongue lesions, Hemangiomas, Congenital malformations, Ultrasonography

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Introduction

Hemangiomas are an extremely frequent congenital malformation. However, benign lesions, sometimes by their dimensions or localization, may take the lead to danger [1]. There are various localizations of vascular malformations, the tongue has specific characteristics [2]; because it not only is susceptible to trauma but also may cause speaking or swallowing problems [3]. Steroids or surgical removal is the suggested treatment for hemangioma in special cases [4].

In this paper, the authors report a rare presentation of vascular malformation in the tongue and its management. This case demonstrates the difficulties that one can face when dealing with such patients, namely with what concerns therapeutic options.

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Case Presentation

We present a male child, born by an elective cesarean section, with the prenatal diagnosis of a giant tongue malformation (40x18 mm), made by ultrasonography at 27 weeks of his mother’s pregnancy. Fortunately, the airways seemed not to be affected and he had no other apparent problems, namely cardiovascular. (Figure 1)

![Ultrasonography at 33 weeks of pregnancy, showing the exteriorized tongue](image)

**Figure 1:** Ultrasonography at 33 weeks of pregnancy, showing the exteriorized tongue

The giant tongue did not preclude that he was immediately intubated orotracheal and was kept ventilated for 21 days. He was fed through a nasogastric tube, even after being extubated because he developed cyanotic crises and bradycardia when oral feeding was tried.

When 3 weeks old and under general anesthesia, the first surgery was tried, removing a large submental tumor mass and, through the mouth, multiple transfix parallel ligations were made all along the tongue. Then followed multiple and successive ligations of the exteriorized tongue till that, on the 84th day of life, the exteriorized portion of the tongue fell, allowing for mouth closure. (Figure 2)

He could be discharged when 117 days old, and already tolerating oral feeding. Later we decided to be more radical and so the anterior portion of the tongue was ligated all around, leading to the falling of that region and an apparently satisfactory result that unfortunately did not last. (Figure 3 and 4)
Figure 2: Aspect of the tongue when aged 1 month

Figure 3: Anterior portion of the tongue sloughing off

Figure 4: Mouth closed before recurrence
Nevertheless, as the tongue tended to increase in size, he was again, submitted to further multiple transfix ligations, plus ligation of the lingual arteries. (Figure 5 and 6)

**Figure 5:** Repeated transfixion ligations

**Figure 6:** When ligating the lingual arteries and partially excising the hemangioma
Those being again unsuccessful, he was then submitted to the removal of all the anterior portion of the oral portion of the tongue and finally be able to look “externally” normal and eat per mouth as any other child. (Figure 7)

Discussion

Congenital cavernous hemangiomas of the tongue are rarely described in the literature, have an uncertain prognosis, mostly related to the size and location of the lesions, therapy being extremely difficult and rarely truly curative, death resulting eventually, several years later, due to uncontrolled hemorrhage [5]. The growth of these lesions can be associated with fetal cardiac Insufficiency and with airway obstruction. Ultrasonography and Doppler can be useful diagnostic tools in evaluating these tumors pre-natal and differentiating them from other tumors such as epigenous (a benign Teratoma).

Antiangiogenic factors like alfa-Interferon to propranolol) corticotherapy, cytostatics (like Vincristine), laser or intraluminal sclerosis, would be futile and even contraindicated in extensive cavernous lesions as this one, and brachytherapy would also be unwarranted (mainly to the possible severe late sequelae following its use) [6,7].

Figure 8: Open bite due to progressive mandibular deformity
Transfixion ligations are, at times, good palliative treatment in hemangiomatous malformations, but were not successful in our Patient. His mandible started to bend down due to the fullness of the tongue, leaving the child with a very severe open bite, imposing a more radical surgical option. Obviously, total excision was inadvisable or even impossible. Apart from surgery only “nature” might give some help. So, the option was for a subtotal tongue excision. (Figure 8)

![Image of a child's face with a black bar over the eyes and mouth]

**Figure 9:** Mouth again closed, and external normal appearance

After that, the mandibular deformity started slowly regressing. The child has been developing normally, breaths and eats well, attends school, and speaks satisfactorily (but benefiting from having speech lessons) (Figure 9).

**Conclusion**

There are multiple recommended techniques that might have to be used in managing hemangiomas of the tongue. However, we conclude that surgery is the therapy of choice in the hemangiomas of the tongue, and it could be performed very safely.

**Patient Consent:** Permission for presentation, involving not only scientific work but any other eventual aim, was given written consent by the Child's Parents.

**Conflict of Interest:** Nil

**Financial Disclosure:** None
References


