

Ankyloglossia (Tongue tie)

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Citation

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Abstract

Ankyloglossia, or tongue-tie, is the result of a short, tight, lingual frenulum causing tethering of the tongue tip. Although most cases resolve or are asymptomatic, some patients develop articulation problems and other concerns related to poor tongue-tip mobility. In this article, I report a 12 year old boy with tongue tie who underwent tongue tie release under local anesthesia without any complication and described various criteria to define the types of ankyloglossia and indications for surgery.

INTRODUCTION

Ankyloglossia is an uncommon congenital oral anomaly that can cause difficulty with breast-feeding, speech articulation, and mechanical tasks such as licking the lips and kissing¹. For many years the subject of ankyloglossia has been controversial, with practitioners of many specialties having widely different views regarding its significance and management. In many children, ankyloglossia is asymptomatic; the condition may resolve spontaneously, or affected children may learn to compensate adequately for their decreased lingual mobility. Some children, however, benefit from surgical intervention (frenotomy or frenuloplasty) for their tongue-tie. Parents should be educated about the possible long-term effects of tongue-tie, so that they may make an informed choice regarding possible therapy^{1,2}.

CASE REPORT

A 12 year old boy presented to me with history of inability to protrude the tongue fully and difficulty in speech since birth. On local examination revealed presence of tongue tie (Fig-1) and the child was able to protrude his tongue up to the lower incisors. The other ENT and general physical examination was normal. The child underwent tongue tie release under local anesthesia by using a curved scissor and the raw area was left as such as it was very small. The post-operative period was uneventful. The routine follow up at 3 weeks showed a normal tongue protrusion and normal speech.

Figure 1

Figure 1: Clinical photographs showing the tongue tie.



DISCUSSION

Ankyloglossia (tongue-tie) limits the range of motion of the tongue, impairing its ability to fulfill its functions like speech, the position of teeth, swallowing, nursing, and certain social activities^{1,2,3}. A lingual frenum attachment limits the tongue's range of motion. The term free-tongue is defined as the length of tongue from the insertion of the lingual frenum into the base of the tongue to the tip of the tongue. Clinically acceptable, normal range of free tongue is greater than 16mm. The ankyloglossia can be classified into 4 classes as follows; Class I: Mild ankyloglossia: 12 to 16 mm, Class II: Moderate ankyloglossia: 8 to 11 mm, Class III: Severe ankyloglossia: 3 to 7 mm, Class IV: Complete ankyloglossia: less than 3 mm¹. A normal range of motion of the tongue is indicated by the following criteria: the tip of the tongue should be able to protrude outside the mouth, without clefting, the tip of the tongue should be able to sweep

the upper and lower lips easily, without straining, when the tongue is retracted, it should not blanch the tissue lingual to the anterior teeth, the lingual frenum should not create a diastema between the mandibular central incisors, the frenum should not prevent an infant from attaching to the mother's nipple during nursing, children should not exhibit speech difficulties¹. Class III and IV tongue-tie category should be revised because they severely restrict the tongue's movement. Children with moderate (Class II) and mild (Class I) ankyloglossia are the most difficult to evaluate. Most of these children appear to have normal speech patterns and are able to effortlessly fulfill most of the criteria listed above. Flexibility of the floor of the mouth is also an important factor in determining the effect of ankyloglossia. It also appeared that, in Class I and Class II ankyloglossia, a natural lengthening of the free tongue might occur as a child grows. Treatment is accomplished in the office after administration of a local anesthetic^{4,5}. General anesthesia or deep sedation is not usually necessary unless an extensive revision procedure is required. The frenum is revised with a sharp curved scissor and the area is sutured with 4-0 gut

suture. The patient is discharged with postoperative instructions to avoid juices and to treat discomfort with non-narcotic analgesics^{1,5}. The most common postoperative problems are pain in front of the ear and dehydration.

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