

1 Ankyloglossia Intervention is Safe Minor Surgical Procedure with  
2 Tubleless Anesthesia

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6 **Abstract**

7 Ankyloglossia, also referred to as tongue-tie, is a congenital anomaly of the tongue  
8 characterized by short and sometimes anteriorly inserted frenulum. Ankyloglossia occurs in  
9 approximately 5

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11 **Index terms—**  
12 All patients were in a good health fasting for 4 hours (breast fed babies) or for 4-6 hours (formula fed babies)  
13 premedicated by atropine (0.01 mg/kg) intravenously at time of induction of anesthesia by mask with halothane  
14 and close monitoring .  
15 While the baby in supine position under good Introduction nkyloglossia, also referred to as tongue-tie,  
16 is a congenital anomaly of the tongue characterized by short and sometimes anteriorly inserted frenulum.  
17 Ankyloglossia occurs in approximately 5% of newborn infants, at a male to-female ratio of 2.6:1 (1) . The clinical  
18 significance of ankyloglossia is a matter of controversy, particularly as it relates to breast-feeding difficulties; sore  
19 nipples (2) , poor infant weight gain (2) , neonatal dehydration (3) , and shortened breast-feeding duration have  
20 been reported as possible consequences of ankyloglossia (2,4) .  
21

22 **1 II.**

23 **2 Patients and Method**

24 We reviewed all the patients with the diagnosis of tongue tie between February 2007 and June 2012 who undergone  
25 a new surgical management to assess the complication and success rates.

26 Patients were identified from outpatient correspondence to general practitioners and pediat-ricians if they were  
27 initially referred for consideration of ankyloglossia as a cause of feeding difficulties, income-plete protrusion of  
28 the tongue out of the alveolus fig( ??) ,improper phonation of some letters , small bifid tongue at the tip fig ( ??  
29 The studied patients were relating to possible complications and some subjective indicators of success after a  
30 minimum 14 day period.

31 **3 III.**

32 **4 Result**

33 Sixty four baby were successfully managed by this method . The mean age of babies on the day of tongue tie  
34 division was( 270) days, with the youngest infant being ( 30) days old and the oldest( 2210) days old. The study  
35 group consisted of 35 males and 29 females.

36 The type of feeding before the procedure was documented and included all types of feeding attempted by the  
37 mother until the date of tongue tie division. Forty mothers were at least partly breast feeding, four infants were  
38 exclusively formula fed.

39 Of the 44 milk fed infants(breast and formula), 35 had problems latching on. twenty three of the mothers had  
40 sore nipples and 5 had mastitis.

41 Thirty tow of the 40 mothers noted an improvement in the ease of feeding after the procedure, with 30 also  
42 noting an improvement in the time taken for a feed. Three of the four formula fed infants were improved in both  
43 these areas.

44 With regard to the complication rate, any bleeding after leaving the clinic was considered significant as well  
45 as any episodes of infection, any need to seek medical advice, and any repeat procedure required to release the  
46 tongue tie. There were no incidents of bleeding, infection and no requirement for further medical advice after  
47 this procedure.

48 **5 IV.**

49 **6 Discussion**

50 Hall and Renfrew rightly describe the literature with relation to ankyloglossia as containing "little high quality  
51 objective evidence"; they also describe the difficulties in study methodology in this setting with particular  
52 reference to concealing the diagnosis from parents in control studies. (5) With regards to intervention, they  
53 note that significant venous bleeding could occur if technique is not meticulous but we found no reports of  
54 serious adverse events".

55 Ankyloglossia intervention has been performed in our center for over 25 years in the operative room with  
56 anaesthetic procedures using endotracheal tube and securing the larynx with packing to prevent aspiration of  
57 blood or any secretion to cut the tongue tie by a scissor and suturing the tongue. like in any oral surgical  
58 intervention procedure.

59 A study done in Glasgow, UK (6) . Which illustrate the management of tongue tie in infants as an out patients  
60 simple procedure to get red from the complication of the anesthesia is shown in table (1).

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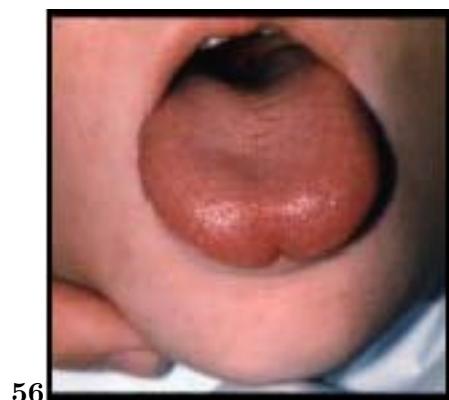
63 **8 I**

64 In this study there is bleeding ,some time the procedure is insufficient to manage the tongue tie.

65 The method which we used depend on the cutting diathermy using low voltage setting of the machine with  
66 tip needle like which will finish the surgery within few seconds without any evidence of bleeding and achieved  
67 sharp cutting of the tie just at the base of the tongue while the baby is deeply anaesthetized and in a time not  
68 more than the time required to put the endotracheal tube and with that number of babies Our study shows that:  
69 No indication for intubation in the management of tongue tie. And the ankyloglossia (frenotomy) can be easily  
70 treated with a low complication using a unipolar cutting diathermy and under tubeless anesthesia. <sup>1</sup>



Figure 1: AnkyloglossiaFigure 1 :



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Figure 2: Figure 5 , 6 :

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Figure 3: Table 1 :



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