

Case Report

Post traumatic near total amputation of apex of tongue: a rare case report

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ABSTRACT

Post traumatic near total amputation of apex of tongue is a rare scenario but when happens it causes life threatening situation due to active intraoral bleeding and risk of aspiration especially in children. Tongue is a unique organ which has very rich blood supply and resides in intraoral cavity. Due to its rich blood supply profuse bleeding is commonly seen after the tongue injury. It helps in swallowing, speech, taste, mastication and airway protection. It facilitates perception of gustatory stimuli. Here author presents a case of 13 months old female child, who presented to emergency department with history of fell down from the bed and sustained tongue injury with profuse bleeding. On examination patient had near total amputation of apex of tongue. Gentle debridement followed by meticulous complex repair of intrinsic muscles of tongue was done. On post-operative day two patient was discharged uneventfully.

Keywords: Near total amputation, Apex of tongue, Swallowing, Speech, Mastication, Taste

INTRODUCTION

Post traumatic near total amputation of apex of tongue is a rare scenario but when happens it causes life threatening situation due to active intraoral bleeding and risk of aspiration especially in children. After this type of tongue injury management of intraoral bleeding is difficult. Also, later on venous impairment can cause massive oedema leads to obstruction of oropharynx and respiratory compromise.¹⁻³ Prompt recognition is life saving.⁴

Tongue is a unique organ which has very rich blood supply and resides in intraoral cavity. Blood supply of tongue is by lingual artery and branches of facial artery. Due to its rich blood supply profuse bleeding is commonly seen after the tongue injury. It helps in swallowing, speech, taste, mastication and airway protection. It facilitates perception of gustatory stimuli. Tongue is having apex, body and root. It has dorsal rough and ventral smooth surfaces. Tongue

always remains in moist condition due to secretion of major and minor sweat glands.

Tongue is a muscular organ which has intrinsic as well as extrinsic muscles. Tongue has wide range of movements and plays a central role in speech. These various movements provide by intrinsic as well as extrinsic muscles.

Injury to tongue leads to inhibition of movements and catastrophic results in future. Meticulous muscular repair is the key during complex repair of tongue after near total amputation of apex of tongue, so that all fine movements of tongue can be achieved completely later on.⁵ Downfall is a common cause of tongue injury in children followed by road traffic accident and self-inflicted injury.^{6,7} Here author presents a case of 13 months old female child, who has near total amputation of apex of tongue with profuse bleeding.

CASE REPORT

A 13 months old female child presented to emergency department by their parents with complaints of pain in tongue and intraoral bleeding. There was a history of fell down from the bed and sustained tongue injury followed by profuse bleeding.

On examination patient had near total amputation of apex of tongue and only small sleeve of tissue was left attached with her tongue (Figure 1). There was profuse bleeding from the tongue. Suction and cleaning of oral cavity was done. Patient was rushed to emergency operation theatre. General anaesthesia with cuffed endotracheal tube intubation was given urgently. Haemostasis was achieved after ligating the bleeding vessels. Gentle debridement followed by meticulous complex repair of intrinsic muscles of tongue with 5-0 polyglactin suture was done. Later on ventral and dorsal mucosal repair were done with same suture (Figure 2). Patient was extubated and shifted to intensive care unit for monitoring. On post-operative day two patient was discharged uneventfully. After three months of follow up patient was doing well as depicted in Figure 3.

There was no scarring at around the suture line. Her tongue movements were well preserved and she was speaking normally according to her age.



Figure 1: Pre-operative view.



Figure 2: Post-operative view.



Figure 3: Post three months result.

DISCUSSION

Tongue is highly vascular organ that is why profuse bleeding occurs after the tongue injury. Healing process in tongue is also very rapid due to its rich blood supply. Tongue injury requires emergency surgical treatment. Delay in treatment can lead to catastrophic results especially in children due to risk of aspiration. Tongue plays a critical role in swallowing, mastication, airway protection and speech. Meticulous repair of tongue muscle are crucial to restore its function. Near total amputation of tip of tongue is rare entity, it is difficult to treat. In our case we obtained very good result with complete survival of amputated tongue. In review of literature few cases of total amputation and partial amputation of tongue were reported.^{8,9}

CONCLUSION

This case demonstrates that healing of tongue is very fast and has very minimal or no complication during the healing phase. Once gentle debridement and meticulous repair has done, tongue restores its aesthetic shape and function quickly and completely.

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