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## Case report

### Tongue injury after car accident in 1.5 years old boy: A case report

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Abstract:- Although most tongue lacerations in children can be treated conservatively, accepted indications for suture repair include complex injury, large flaps, and active bleeding. The purpose of this article is to highlight repair of a unique, severe injury pattern in a child. A 1.5 years old boy after multiple trauma with crash and sever injury of tongue that repair primary and heal well. Although most tongue lacerations in children can be treated conservatively, accepted indications for suture repair include complex injury, large flaps, and active bleeding. Given the severity of the injury in our patient, surgical repair under anesthesia was the obvious choice. In the operating room, the devitalized edges were freshened, and Homeostasis was obtained.

**Keywords:** Tongue laceration, Trauma. Tongue trauma

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### **Background**

The tongue is a complex muscular organ essential for speech, taste, chewing and swallowing(1). Tongue injuries range in severity from minor lacerations to complete amputation. The most common injury location is the anterior dorsum often as a result of falls, seizures, encephalitis, schizophrenia, self-mutilation, sports injuries, electroconvulsive therapy, or child abuse(1,2,3,4). Young children (age 3–4 years) are particularly prone to such injuries after falls(2,5).

majority of such injuries are self-limited, without bleeding, non-gaping, and horizontal in orientation(3). In general, small lacerations of the tongue can be allowed to self-heal when wound margins are in good approximation(4). Because suturing may predispose the tongue to invasive, closed-space infection and requires general anesthesia for children, a surgical closure is recommended only in cases of larger wounds, profuse bleeding, muscle involvement, or full-thickness injury (3,4,5). This case has been reported in line with the SCARE criteria (6). This case presentation wants to show importance of examination and repairmen of Oral cavity and tongue with anesthesia and carefully.

#### **Case presentation**

Our case was a 1.5 years old boy that admitted because of multiple trauma. His GCS was 15 and blood pressure was 90/55, heart rate was 110, We start management of patient with guidelines and chest x-ray was normal and FAST was negative. We focused on oral cavity and bleeding and found this problem



Figure 1: Tongue laceration We scheduled operation to repair his tongue:



Figure 2: Throughout tongue injury



Figure 3: Tongue after repair

After surgery our patient can speak, eat and taste the foods and we can discharge him successfully.

#### Conclusion

The severity of tongue injuries ranges from minor lacerations to complete amputation. The short-term sequel may include pain, inability to speak, bleeding(1). disfigurement, loss of function, infection, swelling, and airway compromise(2,4) Significant trauma at the tongue base may injure the Hypoglossal nerve affecting long-term function(2), including impaired speech(3). Healing with secondary intention may lead to fibrosis and long-term distortion(2). While there is consensus in the management of extreme presentations, there is still debate whether less severe lacerations should be repaired with sutures or allowed to heal with secondary intention (3,7). In general, interventions for severe tongue lacerations should begin as soon as possible, preferably within 8 hours of injury as delay beyond 24 hours can worsen the outcome(2,4,8).

Although most tongue lacerations in children can be treated conservatively, accepted indications for suture repair include complex injury, large flaps, and active bleeding.(9). Given the severity of the injury in our patient, surgical repair under anesthesia was the obvious choice. In the operating room, the devitalized edges were freshened, and homeostasis was obtained. The tongue "halves" were orientated. Instead of selectively identifying individual muscle bundles, a single layer of buried absorbable sutures was used followed by a second layer of running absorbable sutures(9). The most common location for a lacerated tongue injury is the anterior dorsum of the tongue(10) The lingual lesions may occur in a wide array of presentation, from injury requiring no surgical repair, through injuries that can affect the everyday life of the patient, to injuries that put at risk the patient's life and whose management needs to be mastered by the surgeon treating Polytraumatized patients. In our patient partial amputation was the diagnosis since the tongue remained attached by the Infero-lateral border in which the arterial and venous vessels run. There were no signs of vascular compromise and the lingual nerve was intact. The surgical correction was applied under general anesthesia, and moderate tongue swelling was developed without respiratory compromise(11). Amputation of the tongue can put the patient's life at risk and its management needs to be mastered by the surgeons treating polytraumatized patients(12).

#### **Declarations**

#### **Ethical Approval and Consent to participate:**

The content of this manuscript are in accordance with the declaration of Helsinki for Ethics. No committee approval was required. Oral and written consent to participate was granted by the parents.

#### Consent for publication:

"Written informed consent was obtained from the patient's legal guardian for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal."

#### - Availability of supporting data

It is available.

#### - Competing interests:

The author declares that they have no competing financial interests and nothing to disclose.

- Funding: There is no funding.
- Authors' contributions:

Ahmad Reza Shahraki is the surgeon of patient and writes this paper. Reza Abaee collects data's and Elham Shahraki reviews paper.

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PUD is an uncommon diagnosis in children with its complicated presentations being further rare. When a child with acute abdomen is met with free Intraabdominal air on radiographs, PGU should be ruled out as a possibility. Timely surgical intervention preceded by clinical suspicion is necessary to treat PGU and avoid the dreaded complications.

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