Dear Editor;

Tongue swelling (TS) after surgery is a rare but potentially lethal postoperative complication. TS causes include trauma, allergy, infection, bleeding, massive fluid overload and rarely ischemia and infarction of the tongue. In anesthesia practices, it is usually presented after long term oral intubations.

In this report we present TS case which started immediately after operation and lasted 20 hours in child who had undergone a cleft palate repair.

A 3 years-old, 13 kg girl; Non premedicated, after sevoflurane induction, succinylcholine was administered. The trachea was intubated atraumatically, size 4 mm cuffed tracheal tube (Mallincrot). Anesthetic maintenance was with sevoflurane in nitrous oxide/oxygen (50/50%).

After 155 minutes of uneventful cleft palate repair operation and trachea was extubated and taken into postanesthesia care unit (PACU). The patient was observed to have developed TS 20 minutes postoperatively (Fig. 1). It was thought to have been caused by the tongue depressor and the patient observed closely. Her hemodynamic status was normal, bilateral lung ventilation was good, arterial saturation was satisfactory and there was no inspiratory stridor. No ventilation difficulty developed. Methylprednisolon 20 mg was given intravenously. After 1 hour of observation in the PACU no further enlargement and deterioration was seen in the child and she was sent to reanimation care unit for close follow-up. Intubation preparations was made up. The patient was observed with

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her head up and oxygen was given via face mask. With
the help of her mother cold compression was applied
with cold sticks. After her uneventful follow-up, the
child’s tongue regressed to its normal size and she was
sent to plastic surgery ward.

The congestion, caused by the deterioration
of the venous drainage of the tongue lead to the
swelling of tongue. Cyanosis usually accompanies
swelling of the tongue if is an accompanying arterial
obstruction (ischemia, infarct) it. The tongue depressor
of the automatic ecartor which is used in cleft palate
operations may have caused TS by the deterioration of
the venous circulation and may have lead to respiratory
difficulties and difficult airway. In our case TS was
not complicated and remained limited, and because
of that the follow up was limited to observation and
symptomatic treatment. However, after that event we
searched the published literature and found that airway
patency and safety should be provided to the patients
who developed TS, and extubation should only be done
after resolving of the edema and the tongue regressed
to its normal size.

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