

Post Tonsillectomy Neck Hematoma: An Unusual Complication

Tonsillektomi Sonrası Boyun Hematomu: Olağandışı Bir Komplikasyon

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ABSTRACT

Tonsillectomy is a relatively common procedure performed in Otorhinolaryngology (ORL) department. Although hemorrhage is one of its common complication, neck hematoma is rarely encountered. Herein we report an unusual case of neck hematoma in a 15-year-old boy which occurred immediately following tonsillectomy.

Keywords: Hemorrhage, neck swelling, tonsil surgery

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ÖZET

Tonsillektomi, Kulak Burun Boğaz (ORL) bölümünde gerçekleştirilen nispeten yaygın bir işlemdir. Hemoraji sık görülen komplikasyonlarından biri olmasına rağmen boyun hematomu nadiren görülür. Burada, tonsillektominin hemen ardından meydana gelen, 15 yaşında bir erkek çocukta olağandışı bir boyun hematomu olgusunu sunuyoruz.

Anahtar Sözcükler: Kanama, boyun şişmesi, bademcik ameliyatı

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INTRODUCTION

Tonsillectomy was introduced since the first century B.C by Cornelius Celsus(1). Post tonsillectomy complication occurs in only 8-9% of cases (2). The common complications reported in literature are dehydration,fever, hemorrhage,dysphagia and otalgia,to list a few(1-4).To the best of our knowledge, there are no published reports on the occurrence of neck hematoma post tonsillectomy.

CASE REPORT

A 15-year-old boy presented with history of recurrent history of sore throat and fever. Clinically, he was thin and tall with no Marfanoid features. Examination of the oral cavity revealed hypertrophy of both tonsils with inflamed anterior pillars. There was also enlarged bilateral jugulodigastric nodes confirming a diagnosis of chronic tonsillitis. Full blood count and coagulation profile was normal.

A routine tonsillectomy was performed using cold instrument dissection method. The dissection planes were normal and intraoperative blood loss was 100mls. Hemostasis was secured using bipolar diathermy. Following extubation, patient complained of a painful mass over right neck without intra-oral bleeding. The pain was worse with chewing and mouth opening. Examination revealed a tender mass 3.0x3.0cm at the right angle of mandible which was superficial to the underlying masseter muscle (Figure 1). Intraorally, no clots were seen at the ipsilateral tonsillar fossa. There was no drop in hemoglobin count and the coagulation profile was normal.



Figure 1: Front and lateral view of patient showing a mass at right angle of mandible (yellow arrowhead) immediately post tonsillectomy. The overlying skin shows some echymosis.

Ultrasound of the mass revealed a subcutaneous well defined collection with minimal vascularity within representing hematoma. A small artery was found adjacent to the collection, likely representing the right facial artery (Figure 2). He was observed for two days following the surgery and the hematoma regressed in size.

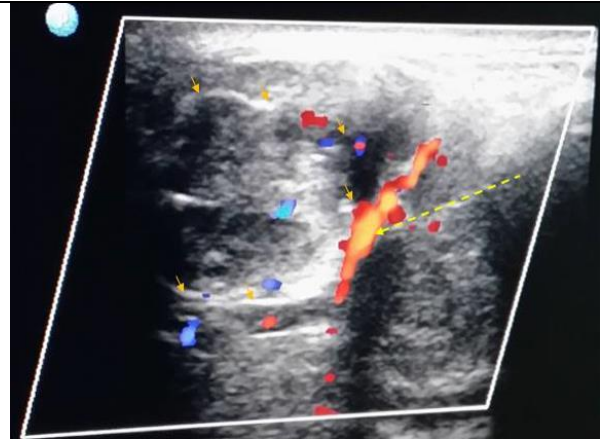


Figure 2: Ultrasound findings of the patient done immediately post tonsillectomy showing a subcutaneous mass of heterogenous echogenicity (yellow arrowheads) with the adjacent right facial artery (yellow dashed arrow)

He was discharged with oral antibiotics and analgesics. At one-week follow-up, the swelling was smaller in size and was no longer tender. Following further counselling, the parents refused surgical evacuation of clots and opted for conservative management. The neck swelling persisted more than 1 month, however resolved during review at 3 months follow up. Histopathological examination of the tonsils revealed chronic inflammation.

DISCUSSION

Paediatric tonsillectomy is usually done for inflammation of the tonsils (52%, i.e recurrent tonsillitis or peritonsillar abscess), obstructive indication (47.8% such as obstructive sleep apnea or sleep disorder breathing), followed by tumour (0.2% either benign or malignant tumour)(5). There are multiple techniques in performing tonsillectomy such as, cold steel dissection, or electrosurgery with bipolar dissection or ultrasonic device such as coblation or Harmonic scalpel. Windfuhr et al. found no significant difference between tonsillectomy techniques and post-operative complications(6). However, a study by Al-Shehri et al. revealed significantly fewer post-operative complication in traditional tonsillectomy compared to cauterization method(7).

In the past literature, post tonsillectomy complications were routinely divided into intra and post-operative. The complication that is mostly studied is post tonsillectomy haemorrhage either primary bleeding (<24 hours) 0.2% to 2.2% or secondary bleeding (>24 hours) 0.1% to 3%(2, 5, 6). The rare complications reported in the literature included death, subcutaneous emphysema with or without pneumo-mediastinum, Grisel's syndrome, pulmonary oedema, pulmonary embolism, parapharyngeal phlegmon, taste disorder and vascular injury(2, 8-10).

To date, there have been no reported case of neck haematoma post tonsillectomy. Shi et al reported a case of floor of mouth haematoma occurring after 3 days of tonsillectomy. Patient had symptoms of sore throat, dysphagia with clinical evidence of haematoma at the floor of mouth. Similar to our case, there was no primary or secondary haemorrhage observed(11). Recently published data suggest risk factors such as smoking, male, age more than 18, peri-operative non-steroidal anti-inflammatory drugs, and prolonged coagulation factor, to cause post tonsillectomy haemorrhage (1, 4). Our patient only met the male criteria as a risk.

In our case, patient developed subcutaneous haematoma at the angle of right mandible. It was believed that the haematoma was contributed by retraction of branches from the facial artery which supplied the tonsils. Once the tonsils have been dissected off its plane, the blood vessel may inadvertently cut-off and cause small branches to retract. Another possible explanation is dissection of an injured branch of facial artery during tonsillectomy. Similar to the case reported by Shi et al, our patient was treated conservatively and follow up at 3 months showed resolution of the neck haematoma.

CONCLUSION

Neck haematoma is a rare complication of tonsillectomy, which occurred in the absence of intraoral bleeding.

Conflict of interest

No conflict of interest was declared by the authors.

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