CASE REPORT

Spontaneous Tonsillar Hematoma: A Rare Presentation of Immune Thrombocytopenia

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Abstract

Aim: We report a case of spontaneous tonsillar hematoma in a 15-year-old male with adenotonsillitis and underlying immune thrombocytopenia (ITP).

Introduction: Immune thrombocytopenia is an acquired autoimmune disorder characterized by isolated thrombocytopenia without other discernible etiology. Reported intraoral manifestations included petechiae, purpura, ecchymosis, and hematoma at trauma-prone site. Spontaneous tonsillar hematoma is rarely encountered.

Case description: A 15-year-old male with underlying ITP presented with fever and sore throat for 2 days with odynophagia, dysphagia, and a change of voice. Examination revealed two large hyperemic masses occupying the oropharynx. Flexible endoscopy showed bilaterally enlarged tonsils. The patient developed spontaneous bilateral epistaxis requiring nasal packing. A blood test showed elevated leukocytes count and thrombocytopenia. Contrast-enhanced computed tomography (CECT) scan revealed adenoid and palatine tonsils hypertrophy with bilateral cervical lymphadenopathy causing oropharyngeal airway narrowing. He was admitted for observation and started on intravenous antibiotics, corticosteroids, and co-managed with the medical team. Nasal packing was removed after 4 days following platelet transfusion. Patient was discharged after 7 days with full resolution of symptoms.

Conclusion: High index of suspicion should be practiced when encountering patients with erythematous oropharyngeal mass. The bleeding disorder should be excluded if the hematoma is suspected.

Clinical significance: Spontaneous tonsil hematoma is a possible manifestation of ITP. Symptomatic ITP should be managed with a multidisciplinary team approach for the best outcome.

Keywords: Adenotonsilitis, Immune thrombocytopenia, Spontaneous tonsillar hematoma.

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Background

Immune thrombocytopenia is an acquired autoimmune disorder characterized by isolated thrombocytopenia without other discernible etiology.[1] Reported intraoral manifestations of ITP to include petechiae, purpura, ecchymosis, and hematoma at trauma prone areas such as gingiva, buccal mucosa, lateral borders of the tongue, and hard palate.[2] Spontaneous tonsillar hematoma is rarely encountered in ORL clinical practice. There have been reports of spontaneous tonsillar hemorrhage attributable to complications of acute or chronic tonsillitis.[3] Hematoma in the oral cavity leads to a plethora of clinical presentations based on the size of hematoma, location, and rate of accumulation.[4] We present a case of spontaneous tonsillar hematoma in a patient with acute adenotonsillitis and underlying ITP.

Case Description

A 15-year-old male patient presented to the emergency department with fever and worsening sore throat for two days with progressive odynophagia, dysphagia, a change of voice, and foreign body sensation at the throat. The patient was diagnosed with ITP at the age of 2, but he defaulted on all forms of treatment for the past 5 years. Otherwise, the patient denied any intraoral and toothbrush trauma. On examination, he had a muffled voice but was not in respiratory distress. He was not tachypneic nor stridorous. Intraoral examination revealed two large hyperemic masses occupying the entire oropharynx (Fig. 1). On neck examination, firm and tender swellings were palpable bilaterally at levels II–IV. Flexible endoscopy showed bilaterally enlarged tonsils with hematoma causing narrowed oropharyngeal space. The airway was otherwise patent.

Subsequently, the patient developed spontaneous bilateral epistaxis requiring nasal packing. A blood test showed an elevated leukocytes count of $17.9 \times 10^3/\mu L$ and thrombocytopenia at $2.5 \times 10^3/\mu L$. Contrast-enhanced computed tomography neck (Fig. 2) revealed adenoid and palatine tonsils hypertrophy with bilateral cervical lymphadenopathy causing oropharyngeal airway narrowing and compression of bilateral internal jugular veins.

He was admitted for observation and started on intravenous (IV) cefuroxime 750-mg three times a day (TDS) and metronidazole 500-mg TDS. The patient was co-managed by a general medical

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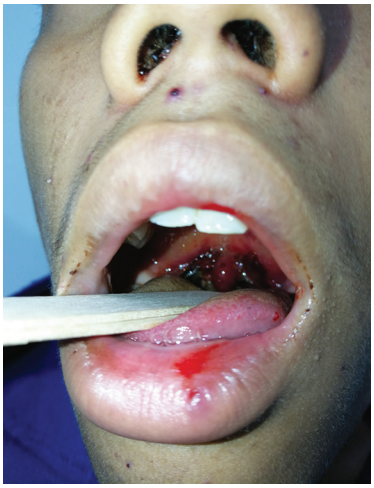

Fig. 1: Bilateral tonsil hematoma on presentation

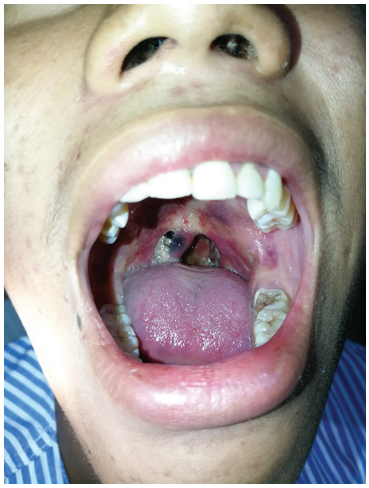

Fig. 3: Tonsil hematoma in resolution at day 6 of admission

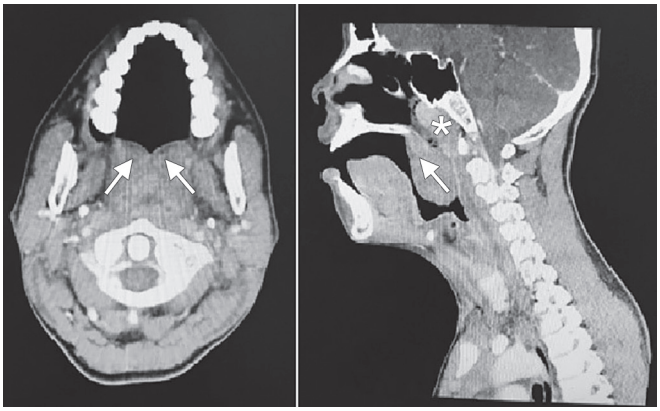

Fig. 2: Contrast-enhanced computed tomography scan of neck revealed adenoid (*) and palatine tonsils hypertrophy (arrow)

team during admission. He was started on IV hydrocortisone 100-mg TDS for four days, followed by IV methylprednisolone 500-mg OD for three days before converting to oral prednisolone tapering dose. Nasal packing was removed on day 4 of admission. Blood investigation done prior to removal of nasal packing revealed thrombocytopenia at 7.4×10^3/μL. A decision was made for two units of platelet transfusion before and after the removal of packing to prevent re-bleeding in view of persistent thrombocytopenia. No epistaxis was recorded after packing removal. Resolution of bilateral tonsil hematoma was noted on day 6 of admission (Fig. 3). After completion of intravenous antibiotics for 7 days, his symptoms had fully resolved with no more bleeding tendency and a good appetite. He was discharged with low-dose oral prednisolone while awaiting an appointment at a tertiary hematology center. He was seen in our clinic after 2 weeks and there was no recurrence of bleeding and complete resolution of tonsil hematoma.

Discussion

Oral mucosa hematoma is a possible manifestation of ITP. The diagnosis of ITP is through the exclusion of alternative causes for thrombocytopenia such as thrombotic thrombocytopenic purpura, disseminated intravascular coagulation, and bone marrow depression, among others. Pathophysiology of the disease is thought to be immune mediated. However, it is now known that more intricate mechanisms are involved including increased peripheral platelet destruction and reduced production.[1,2] Most patients with ITP can be treated conservatively, with the more aggressive options reserved for patients with severe and symptomatic thrombocytopenia. The goal of treatment is achieving a sustainable hemostatic platelet count with minimal adverse drug effects.[1]

Our patient presented with grade II bleeding severity according to the ITP Bleeding Scale as he had bleeding in the oral cavity with epistaxis.[5] Acute treatment of major bleeds required a median of three treatments including intravenous immunoglobulin, corticosteroids, and platelet transfusions.[6] After discussion with the medical team, IV immunoglobulin was not given as he was responding well to the other medications. It was found that platelet count is a poor indicator of bleeding in marked thrombocytopenia (30×10^9/L) such as in our case. However, more patients with oral mucosa bleeding developed intracranial hemorrhage.[5] Hence, the close observation of the patient's progress is paramount to act fast if any major bleeding were to occur.

Spontaneous hematoma of the tonsils without precipitating trauma is rarely encountered and may be confused with vascular mass at the oropharynx. Oral thrombocytopenic purpura mainly manifests as small single or multiple petechial hemorrhages, ecchymosis, hemorrhagic blisters, or as spontaneous bleeding around the soft tissues most susceptible to trauma, such as the buccal mucosa from cheek biting, the junction between the hard and soft palate in denture wearing subjects or the gingiva.[7] The hematoma formation in our patient was possibly precipitated by an infection of his tonsils. Computed-tomography scan was done to delineate the site and source of hematoma and demonstrate the presence of vascular mass like internal carotid artery pseudoaneurysm or angiofibroma.[8]

The treatment of hematoma generally depends on its location, size, and compression on an adjacent structure. Management often involves surgical drainage and bleeding control.[8] For this case, drainage was avoided due to an underlying blood disorder. Gradual enlargement of tonsillar hematoma can produce a ball–valve effect, leading to airway obstruction. Therefore, the patient should be monitored closely in anticipation of respiratory distress

due to upper airway impediment. Patients with symptomatic ITP should also be co-managed with a hematologist to ensure the best outcome and minimize complications.

Conclusion

The clinician should practice a high index of suspicion when faced with a patient that presents with erythemal oropharyngeal mass. Comprehensive history taking is important to allude to possible causes such as bleeding disorder.

Clinical Significance

Spontaneous tonsil hematoma is rarely encountered in clinical practice. It can be a manifestation of ITP. Patients with symptomatic ITP should be managed with a multidisciplinary team approach for the best outcome and to minimize complications.

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