Post tonsillectomy quinsy

Sir.

Post tonsillectomy quinsy (PTQ) is a rare entity, few cases have been reported in the English literature where they usually present years after tonsillectomy. Number of causes have been implicated in its pathogenesis that includes, infection of tonsilar remnant, Weber's gland suppuration and infection secondary to foreign body or trauma in peritonsillar region and less common tuberculous granuloma. Moreover, some conditions have been presented as quinsy such as Kawasaki disease, tonsilar metastases from renal carcinoma and infectious mononucleosis.1 A 20-years-old male presented to the Beaumont hospital, Dublin, Ireland with a complaint of sore throat of 3 days duration that progressed to dysphagia, trismus and low-grade fever despite of oral antibiotics. He had tonsillectomy at the age of 7 years and had no complaint of recurrent sore throat since then. On examination, he had marked trismus, swelling of the right side of the soft palate, and the uvula was pushed towards the left side. there was no evidence of tonsilar remnant. The jugulo-digastric lymph node of the right side was large and tender. Ear nose and throat (ENT) examination was essentially normal. Temperature was 37.9°C, white blood cell count 13x10°/L and the mono spot was negative. Incision and drainage were carried out under local anesthesia, approximately 6cc of pus was evacuated and sent for culture and sensitivity, which showed no growth. The patient was admitted for intravenous antibiotics, his temperature and trismus subsided and was discharged in a satisfactory condition with a follow up appointment. The pathogenesis of PTQ is still unclear, however, a

number of theories have been suggested. Studying the embryology and anatomy of tonsil may help understand this entity. The tonsils are derived from the 2nd branchial pouch and occasionally the membrane between the pouch and cleft persist, giving rise to the internal branchial cyst and fistula or both (Duct of His) (Figure 1). The congenital anomaly lying between the tonsil and the superior pharyngeal constrictor muscle may persist as a cyst or fistula, and drain via a tract to the normal derivative of the 2nd branchial pouch, the tonsilar fosse. Tonsillectomy may predispose individuals such a cyst or fistula to recurrent abscess just as post tonsillectomy scar tissue may decrease or obstruct drainage of the cyst or fistula tract, making abscess formation likely² (Figure 2). Moreover, Weber's gland are tubular serous glands lining the tongue, which extend into the tonsilar fosse and pole superiorly, are often left behind following tonsillectomy where potential exists after healing for suppuration and abscess formation.3 An interesting study was carried out to investigate the infectious route of peritonsillar abscess of 83 patients and found that Weber's glands have fibrotic and inflammatory changes in the quinsy side while normal in the nonquinsy side, which further supported the Weber's gland theory.4 The reported culture of pus aspirated from the region ranged from sterile⁵ as seen here in our case to a variable organisms growth; that included corynebacterium species, fusobacterium enterbacterobacteriaceae species, cloaca, staphylococcus B-hemolytic epidermidis, streptococcus.6 It's fair to mention here that there reported association of infectious was no mononucleosis with PTQ as with our case. Post tonsillectomy quinsy is uncommon and not a clearly understood entity that may present many years after

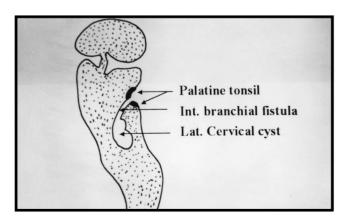


Figure 1 - Post tonsillectomy quinsy, a case report.

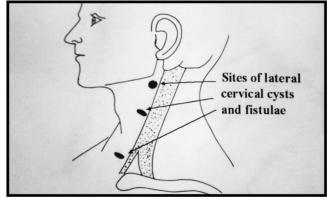


Figure 2 - Post tonsillectomy quinsy, a case report.

tonsillectomy. The treatment depends on the cause when found. Finally, proper care should be taken when conducting tonsillectomy especially, with a history of quinsy to excise any associated Weber's gland and look for any related duct of his that may require neck exploration.

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References

- 1. Monem SA, O'Connor PF, O'Leary TG. Irish Med J 1999; 92: 278-280.
- 2. Iemma M, Maurer J, Riechel MH. The Duct as a cause of peritonsillar abscess and after tonsillectomy. *HNO* 1992; 40: 94-96.
- 3. Passy V. Pathogenesis of peritonsillar abscess. *Laryngoscope* 1994; 104: 185-190.
- 4. Chen Z, Zhou C, Chen J. Investigation of the infectious route of peritonsillar abscess. Chines J of Otolaryngology 1997;
- 5. Burstin PP, Marshall CI. Infectious mononucleosis and bilateral peritonsillar abscess tonsillectomy. *J of Laryngology*
- & Otology 1998; 112: 1186-1188.

 6. Ravi KV, Brooks JR. Peritonsillar Abscess-unusaul presentation of Kawasaki Disease Review. J of Laryngology & Otology 1997; 111: 73-74.