Draining a peritonsillar abscess

DAVID VEIVERS MB BS, FRACS

Peritonsillar abscess is an uncommon complication of acute tonsillitis that should have a good outcome when managed well.

A peritonsillar abscess or 'quinsy' – an abscess collecting in the potential space between the tonsillar capsule and the bed of the tonsil (superior constrictor muscle) – usually follows a case of bacterial tonsillitis but can occur after foreign body penetration into the peritonsillar space. The condition arises in 30 individuals per 100,000 population per year.

Most abscesses are anterior but some have their focus posteriorly. Causative organisms include streptococci, *Haemophilus* and staphylococci (75, 25 and 10% of cases, respectively). Many aspirates are polymicrobial and many contain anaerobes. Some, however, are sterile; there can be many reasons for this, including the antibiotics the patient has been taking.

Patients with a peritonsillar abscess will have a sore throat and odynophagia, and there may be otalgia, malaise and a 'hot potato' voice. The soft palate will be swollen on the affected side and the uvula pushed to the opposite side, obscuring the tonsil. More posterior placement of the abscess makes the tonsil appear more prominent and pushes it forward, towards the examiner. The hallmark of the diagnosis is asymmetry of the tonsillar fossae. However, asymmetry does not always correspond to the presence of an abscess as it can occur when there is a peritonsillar cellulitis without the formation of an abscess.

Trismus (the involuntary spasm of the muscles of mastication, presenting as difficulty opening the mouth) is present in up to two-thirds of cases. There is usually an enlarged jugulodigastric lymph node. Fever is usually a feature.

The differential diagnosis includes rare cases of metastatic malignancy in the tonsillar fossa, the asymmetry thus caused appearing similar to that of a peritonsillar abscess. Also to be excluded are tumours such as lymphoma, which can cause unilateral enlargement of the tonsil, although in these cases the tonsil itself is enlarged, rather than the surrounding peritonsillar tissues.

Persistent trismus, lateral pharyngeal abscess (parapharyngeal abscess), mediastinitis, airway obstruction, dehydration, aspiration and pneumonia may complicate peritonsillar abscess.

Dr Veivers is ENT Staff Specialist, Royal North Shore Hospital, Sydney, NSW.

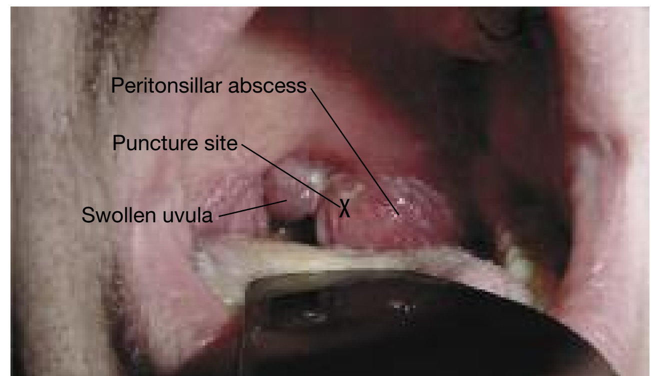

Figure 1. A peritonsillar abscess or quinsy, showing the puncture site for aspiration.

The persistent trismus, when it occurs, is caused by fibrosis in the region of the medial pterygoid muscle. A parapharyngeal abscess should be suspected when the signs of the infection and especially trismus fail to resolve with treatment by drainage of the abscess. Persistent signs may, of course, be due to recurrence of the quinsy, and the best way to sort out the difference is to perform a CT scan with IV contrast.

Management

Patients with peritonsillar abscess normally require admission to hospital for drainage of the abscess. In a rural setting where hospitalisation may not be possible, the abscess could be drained in the surgery if there is not too much pharyngeal swelling and the patient is able to maintain adequate hydration and can be relied on to return for follow up.

Preparation

The equipment required includes a 21-gauge needle, a 10 cm^3 syringe, a tongue depressor, an effective headlight, bacteriological culture swabs and provision for the patient if he or she faints.

Preparation of the patient involves setting up intravenous access and commencing antibiotics to cover the possible causative organisms. Generally penicillin (BenPen) and metronidazole (Metronidazole Intravenous Infusion) are used, unless the patient is allergic to penicillin when the drug of choice is clindamycin (Dalacin C Phosphate Sterile Solution). Many patients are dehydrated and rehydration with intravenous fluids is usually necessary.

Aspirating the abscess

I normally drain the abscess by aspiration rather than lancing it because aspiration is generally the easier procedure to perform.

With the patient sitting, prepare the area with 10% lignocaine spray (Xylocaine Spray) or 5% lignocaine plus 0.5% phenylephrine (Cophenylcaine), and then wait long enough

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for the anaesthetic to have its full effect before proceeding. Aim the needle at a point on the abscess where the bulge is maximal, usually just above the level of the tonsil, and aspirate while advancing the needle until pus is obtained. Stay at that point until no further pus is obtained. If the aspiration is negative, try aspirating at another angle or start point, and consider the diagnosis of cellulitis rather than abscess.

Get the patient to rinse with saline mouthwash after the procedure. Bleeding occurs after aspiration in most cases but the volume is usually small, normally amounting to spitting up of bloodstained sputum. Pus does not usually continue to drain through the aspiration hole. Sometimes the abscess needs to be drained a second time, normally about 24 hours after the first aspiration.

Microbiology of the aspirate is usually performed but often does not change the treatment given.

Complications

The only significant complication of the aspiration procedure is worsening swelling because of bleeding around the area of the abscess. This, however, is rare, and seldom causes an acute airway problem.

Follow up

Review the patient twice daily. When the swelling has begun to resolve, the trismus has gone and the patient begins to be able to swallow, discharge can be considered. It is recommended that antibiotic treatment be continued for a total of 10 days. Follow up the patient at one to two weeks after the procedure.

Tonsillectomy

Quinsy tonsillectomy is a procedure with an increased complication profile (such as bleeding and aspiration of pus during intubation) and I have not found the need to do it except in children who do not tolerate a drainage procedure. For patients who have had many attacks of tonsillitis and then a quinsy, I recommend tonsillectomy. For those who have had only a quinsy, I adopt an approach of observation and perform tonsillectomy if a quinsy occurs a second time or the patient suffers recurrent tonsillitis.

Conclusion

Peritonsillar abscess is an uncommon complication of acute tonsillitis that should have a good outcome when recognised and managed well. This management involves appropriate antibiotics and drainage, most commonly in the form of aspiration. MT

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