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A safer way to aspirate a quinsy

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Abstract

Quinsies (peritonsillar abscesses) are routinely treated in all ENT departments. This paper outlines a technique for safe aspiration of a quinsy, which minimizes the risk to adjacent structures.

Key words: Peritonsillar Abscess; Drainage; Needles; Surgical Procedures, Operative

Introduction

A quinsy is most commonly aspirated with a large bore needle or is treated by incision and drainage. Ultrasound guidance may allow more accurate aspiration with real time images to ensure correct needle placement but as yet most units have not adopted this technique. Any method to improve safety and to reduce patient anxiety should therefore be welcomed by all who perform the procedure.

The site of aspiration of a quinsy will vary between patients and with the size of the quinsy, but common practice suggests that aspiration should be attempted around the intersect of the vertical line from the anterior tonsillar pillar and the horizontal line of the lower edge of the soft palate, while also taking into account the area of maximal bulging of the mucosa. If nothing is aspirated then another area should normally be tried, although there is no evidence to say how many attempts are optimal. However, after three to four passes it is probably reasonable to assume either that there is peritonsillar cellulitis only or that the abscess is small and will likely respond to antibiotics alone.

Posterior to the tonsil and peritonsillar tissue is the parapharyngeal space. The carotids are found in the sagittal plane of the upper posterior alveolar margin medial to the parapharyngeal space. A Japanese study that involved computed tomography (CT) scanning of 31 patients with quinsies showed that when conducting aspiration or drainage of a quinsy the needle should be advanced sagittally from the point of incision to a depth of no more than 20 mm^2

With junior doctors (and possibly nurse practitioners in the imminent future) performing the vast majority of such treatments, and with the relative rarity of such presentations, there can be limited experience of performing aspiration by the attending clinician. The risk with bare needle aspiration is that it is difficult to tell how deep you are inserting the needle and, when searching for a collection while pulling back on the syringe, it may enter more deeply than was intended. Techniques of taping or marking the needle can be effective but with blood coating the depth of insertion of the needle may still prove difficult to interpret. In addition, simple marking does not stop the needle from inadvertently advancing more deeply than was anticipated.

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We have developed a simple way to allow the needle to be inserted up to 20 mm and which prohibits any further



Fig. 1 Syringe and 14 gauge needle with mark 20 mm from needle tip.



Fig. 2 Needle sheath cut at mark.



 $$\operatorname{Fig.} 3$$ The needle tip protrudes 20 mm from the sheath's cut end.

advance. It is easy, effective, costs virtually nothing and is sterile.

Technique

The technique uses a white 14 gauge needle and a 10 or 20 ml syringe and some heavy scissors.

- 1 With the needle still sheathed, measure 20 mm from the needle tip and mark this point on the sheath (Figure 1).
- 2 Remove the sheath and cut it across at the mark (Figure 2).
- 3 Carefully re-sheath the needle (which is still sterile at this stage) and attach it to the syringe. Then proceed with the aspiration (Figure 3).

Discussion

Using this method the tip of the needle cannot be inserted further that 20 mm thereby greatly reducing the risk of vascular injury. We also feel this method has served to decrease the anxiety of our patients. This technique has been successfully practised in our department since September 2005 and has proven extremely beneficial to trainees who have little experience of quinsy aspiration.

We therefore advise that this safer technique is practised by experienced and inexperienced doctors and believe that it is certainly the technique of choice to teach new senior house officers, pre-registration house officers and nurse practitioners the technique of safe aspiration of a quinsy.

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