Technical note

A novel method of managing persistent parotid sialocele

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Abstract

Sialocele formation is a recognised complication of parotid surgery. The initial management is usually conservative and often effective. We present a novel method that utilises an intra-oral approach and pig-tail catheter for safely and rapidly draining a large persistent sialocele. It is particularly appropriate when other methods have failed and the skin is at risk of breakdown.

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Formation of a sialocele is a recognised complication of parotid surgery. It is less common after extensive parotid surgery such as subtotal parotidectomy than after partial superficial parotidectomy. 1 It has been reported in 6–39% of cases of partial superficial parotidectomy, 1, 2 and its incidence may be influenced by the nature of the disease. In one series of 150 cases the incidence of sialocele formation was greater (10.3%) after parotidectomy for inflammatory disease than for tumours (3.6%). 3 Most resolve spontaneously but up to 4% may progress to form a fistula or abscess. 4 Initial management is usually conservative, but invasive treatment may be indicated if the situation worsens. We describe a novel technique using a pigtail catheter to avoid serious complications in a large persistent parotid sialocele.

A 51-year-old man developed a large preauricular swelling on day five after partial superficial parotidectomy (Fig. 1). The amylase content of the fluid was consistent with a sialocele origin. Initial conservative measures, which included pressure bandages, hyoscine patches, and multiple aspirations, were done over several weeks without success. Urgent decompression became necessary to prevent breakdown of the skin and formation of a fistula. This was achieved and maintained by inserting a size 8 Fr pigtail catheter into the sialocele by a transoral approach under general anaesthesia (Fig. 2). There is a small risk to the facial nerve and parotid duct, but this can be minimised with care. Aspiration of saliva from the trochar confirmed the correct position of the catheter, but this could also be done using an ultrasound-guided approach. The catheter was then placed into the sialocele, the free end was spatulated and sutured to the oral...

Fig. 1. A large right-sided preauricular swelling five days after partial superficial parotidectomy.

Fig. 2. Insertion of a size 8 Fr pigtail catheter into the sialocele through a transoral approach under general anaesthesia. The trochar is inserted just below the parotid papilla.

mucosa (Fig. 3), and it was left in place for four weeks to allow epithelialisation of the tract. It will act as an alternative route for drainage if the parotid duct has been damaged during the original operation or placement of the catheter. Prophylactic antibiotics were prescribed. The sialocele resolved without formation of a fistula and there have been no problems with recurrence over a three-year follow-up period.

Many options are available for the management of a parotid sialocele including multiple aspirations, hyoscine patches, compression dressings, the use of botulinum toxin and, rarely, external beam radiotherapy. Use of a catheter with an external facial incision has previously been described, but the current technique avoids the need for an external scar. The principal mechanism of action is to prevent the accumulation of saliva under the skin flap while adhesion occurs between the skin and parotid tissue, and it encourages the saliva to discharge through the parotid duct or catheter introraorally.

This simple technique is a useful addition to the range of options available for the management of a persistent parotid sialocele. However, it should be reserved for those that are large and recalcitrant, and is particularly indicated when the viability of the skin is imminently at risk.

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None to declare.

Conflicts of interest

None.

References