could endanger various vital structures such as the skull base, the internal maxillary artery, and the facial nerve, among others. The technique is therefore suitable only for an experienced surgeon and not for trainees.

There is a chance of the rotary instrument losing balance while the hole is being drilled or the screw tightened, as the drill is placed on a small movable condylar head. There is always the risk of accidental injury to vital structures from a rotary instrument or from losing the screw deep in the infratemporal fossa.

Because of the high cancellous content of the condylar head, there is a possibility that the screw may separate from the condylar head as a result of the force applied to reduce the fracture, which necessitates the placement of a second hole. Repeated puncture of the condylar head poses difficulty in plating because of the presence of multiple track holes; it also increases the use of rotary instruments.

For the past year I have been using a different method (the wire loop technique) to retrieve and reduce the condyle, with good results. With this method a 24-gauge wire is twisted in the form of loop. After the proximal condylar stump has been isolated, the wire loop is inserted, and the condyle engaged so that the loop surrounds the lateral pterygoid muscle. Once the position of the wire has been confirmed, the loop is twisted together. The condyle can then be manipulated to retrieve or reduce accordingly, with the help of artery forceps clamped at the outer edge of the wire.

This technique avoids unnecessary instrumentation and preserves the bony architecture of the condyle for fixation. By combining both techniques (wire loop and screw) it is possible to eliminate the various disadvantages of screw fixation.

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## Re: A new anatomical landmark to simplify temporomandibular joint arthrocentesis

Sir,

We read with interest the technical note from Alkan and Etöz.<sup>1</sup> Temporomandibular joint arthrocentesis is used in the management of joint disorders. This procedure, if performed correctly, it can alleviate pain and increase mouth opening. As it is stated by the authors in some cases it is difficult to insert the needle in the desirable position in the joint and the procedure fails to provide some benefit. The two needle technique was described by Nitzan et al.<sup>2</sup> and may used effectively in a large group of patients. In our experience the Shepard cannula<sup>3</sup> is a more effective way of performing joint lavage and has been used in our practice for many years. The authors stated in this technical note that the size of the Shepard cannula may be a risk to the facial nerve and blunting of its tip may increase the risk of infection. To our knowledge there are no reported cases of either. Although the landmark as described by the authors may be used effectively in the two needle technique, it is important to recognize that a Shepard cannula can still deliver a more substantial lavage of the joint and consequently a more reliable outcome. We have found the upper joint space is reliably located 2 cm anterior and 2 mm inferior to the tragus along the tragal-canthal line.

Palpation of the condylar head confirms correct location and joint puncture with the Shepard cannula is predictable and straightforward (Fig. 1). The senior author has used the Shepard cannula in over 220 patients with no facial nerve complications.



Fig. 1. Cannula in situ.

## **Conflict of interest**

The authors have no conflict of interest to declare

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# Foreign body granulomatous reaction of the temporal region following dermal filler administration

Sir,

A 46-year-old female presented with a 6 week history of an increasing mass in the right temporal region. Imaging revealed an ill defined  $12 \text{ mm} \times 6 \text{ mm}$  mass and a tumour, possibly a sarcoma was suspected (Fig. 1). An FNA was non-diagnostic and wide local excision was performed. Histology revealed a fatty mass containing birefringent material



with a foreign body giant cell reaction and chronic inflammation. The patient recalled bilateral injections of the dermal filler "Scupltra" (Poly-L-Lactic acid) 1 year previously for "temporal hollowing". Late onset granulomatous reactions to dermal fillers may increasingly be seen at unusual sites and it is therefore essential that the patient is adequately informed of the risks involved.<sup>1,3</sup>

The majority of dermal fillers currently available are simply passive space fillers, however agents such as Poly-L-Lactic acid (PLLA) are active and capable of increasing fibroblast activity, stimulating collagen formation.<sup>2</sup> It is this collagen deposition which gives the final appearance.

The exact cause of the inflammatory reaction is still not fully understood, however the most likely cause is clustering of the PLLA particles as a result of uneven distribution. This is frequently seen after incorrect depth of injection, insufficient dilution of product prior to injection and injection into highly dynamic muscles.<sup>3</sup> Early treatment with antibiotic therapy can improve any acute inflammation, additional concomitant treatment can include systemic antihistamines, steroid injections and surgical excision.<sup>2</sup>

### **Conflict of interest**

None to declare.

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Fig. 1. Computed tomogram of temporal fossa.