

« Traditionally the altered cast technique, a two-stage technique, has been advocated as a method to record the differential support provided by teeth and the support that can be obtained from the more displaceable edentulous ridge. The aim was to improve load distribution and increase stability of the denture.

However, it has been found that a one-piece impression can offer base support equal to that of an altered cast impression technique. Achieving this depends on the quality of the definitive impression, fit of the framework checked under magnification, and extension of the bases onto anatomic landmarks.<sup>12</sup>

The authors find it easier to do this one-piece impression in two stages. This allows focus on recording the anatomic landmarks of the saddle separately (as per complete denture), and then subsequently recording the details of the teeth and tooth preparations.

A spaced tray with stops is fabricated on the primary cast. The extension is checked in the mouth and adjusted if necessary. The distal extension and lingual border are border moulded and then an impression made of the saddle area. Trim the set impression material to give 4 mm clearance from the teeth, this allows a suitable thickness for the wash impression material over the teeth and ease of reinsertion. A second stage wash impression will record the teeth and preparations. The tray can then be resealed to the same place and held firmly down over the saddle area whilst the border moulding is repeated and until the wash impression sets. This provides an undisplaced impression of the teeth and a displaced impression of the tissue of the distal extension. The authors prefer greenstick and medium bodied silicone for the saddle/lingual area and a lighter bodied silicone or alginate for the secondary wash.

### Conclusions

As with all dentures, regular review is important to ensure that the denture is functioning well and oral hygiene remains good. Due to the potential for greater alveolar resorption in the mandible, the denture should be regularly assessed for saddle fit, and the need for relines, which will be more frequent. This will maintain denture stability and minimise tissue damage in the longer term. ■

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### CLINICAL PUZZLE

## Last standing molar



Fig. 1 Radiograph of the patient's dentition

A 52-year-old patient presented with BPE scores of:

1	1	1
4	1	1

The dentition was otherwise stable with no active caries (Fig. 1)

The 46 had distal bone loss to the apex with distal pocketing of 11 mm with a purulent discharge.

There was no mobility, no furcation involvement clinically, and a negative response to sensibility testing. The patient was very keen to keep the tooth as the last standing molar on the lower RHS.

Discuss your likely diagnosis and management options for the 46 (lower right 6).

Send your answers to [k.quinlan@nature.com](mailto:k.quinlan@nature.com) by 6 April 2023.

The answer will be revealed in an upcoming issue.

If you would like to send a clinical puzzle, view the details here:

<https://www.nature.com/articles/s41415-022-5392-2>. ✦

## Perspectives on practice-based research networks

This month the BDJ Perspectives section focuses on practice-based research networks.

Associate Editor Professor Avijit Banerjee explains:

'Much of the clinical research carried out in specialist hospital settings, although important and useful, is not always immediately translatable and implementable in the primary care setting. Thus, there is a need for more oral and dental primary care research to be carried out on real patients by all members of the oral healthcare team, in real-life situations. This month's BDJ Perspectives theme focuses on this primary care, practice-based research, with commentaries to help the team appreciate its critical relevance in oral healthcare delivery, the support available to carry it out in primary care and examples of ongoing national clinical trials to get involved with. Remember, involvement in oral healthcare research is a team duty, just as important as delivering optimal healthcare to our patients!'

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