

# A successful, long-lasting result

**Nishan Dixit** describes a case where submerged primary molars were restored using a simple technique with Venus Pearl composite.

**A** 17-year-old male patient presented with submerged lower primary second molars (fig 1). The teeth were out of occlusion, sitting low in centric (figs 2 and 3). Although they were asymptomatic, the patient was unhappy with their appearance and wanted them to be corrected. He had a clear medical history and good oral hygiene. However, his past dental attendance had been irregular.

A general examination revealed caries in both upper first molars and the presence of partially erupted upper and lower third molars on the right side. Kulzer Venus Pearl composite, A3 shade was used to restore the upper first molars using a total-etch technique, adhesive and layered protocol. The partially erupted wisdom teeth were to be kept under observation, as there was no relevant signs or symptoms associated with them.

A range of treatment options for the submerged teeth was discussed. The patient was offered referral to a specialist orthodontist to be assessed and treated. When he was older, the teeth could be extracted and replaced with a Maryland bridge or dental implants. Until he was ready to have definitive treatment, a temporary denture could be considered, or the teeth built up with composite, to maintain the spaces.

The patient was adamant that he didn't want orthodontic intervention and wanted to avoid invasive dental



Fig 1: A 17-year-old male patient presented with submerged lower primary second molars



Fig 2 and 3: The teeth were out of occlusion, sitting low in centric.



Fig 4: After casting a model from the impression, a transparent stent of the diagnostics was fabricated.

work, so he chose to have the lower primary second molars built up with composite. I was also keen to avoid invasive methods and prefer to offer composite restorations, when the clinical situation allows.

## Simple composite restoration

A diagnostic wax-up of the proposed outcome was created. This was shown and explained to the patient, who then gave consent to treatment. An



Figs 5 and 6: The composite in the stent was bonded onto both of the submerged teeth.



Figs 7 and 8: The patient's occlusion was carefully checked in all excursions.

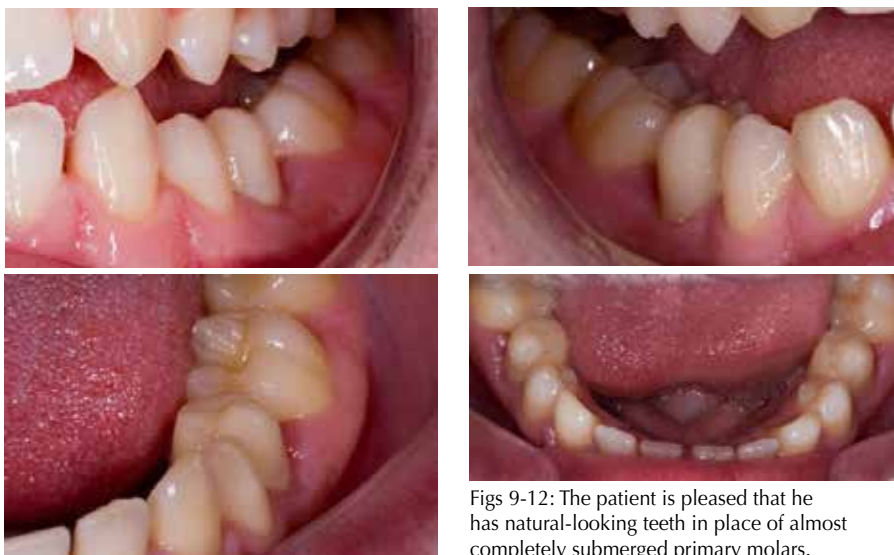
impression was taken with Kulzer Xantasil. Xantasil is a single-mix, medium body alternative to alginate and produces impressions with excellent detail, which set within 90 seconds. After casting a model from the impression, a transparent stent of the diagnostics was fabricated (fig 4).

Polytetrafluoroethylene tape was used to isolate the adjacent teeth. The submerged teeth were then etched with 37 per cent phosphoric acid and bonded, using a total-etch technique in accordance with the manufacturer's instructions. Venus Pearl composite,



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Figs 9-12: The patient is pleased that he has natural-looking teeth in place of almost completely submerged primary molars.

outcomes, providing excellent colour adaptation, wear resistance and a natural finish. The material employs the same tricyclodecane urethane dimethacrylate resin as Venus Diamond, which is totally unique to Kulzer. Compared with earlier technologies, the cured composite is more flexible under stress and more durable over time.

#### Natural, long-lasting result

This simple technique has proved to be successful and long lasting. The restored primary molars have been in function for seven years. There was no disruption to other teeth and if the composite build-ups fail or fall off, they can be replaced, or other restorative options considered. The longevity of the treatment has proved beneficial to the patient, as he does not regularly attend the practice and has returned to live in Ireland.

The patient was very happy with the non-invasive, straightforward approach. He is pleased that he has natural-looking teeth in place of almost completely submerged primary molars (figs 9-12), and that they continue to serve him well seven years later.

A3 shade was placed into the stent. A single shade was used, as the aesthetic properties of Venus Pearl worked well as a monochromatic restoration in this instance. The stent was transferred into the mouth and the composite in the stent was bonded onto both of the submerged teeth (figs 5 and 6). After curing, the composite restorations were polished using the Kulzer Venus Supra polishing kit and the margins were finished with a

fine flame-shaped bur. The patient's occlusion was carefully checked in all excursions (figs 7 and 8). A balanced occlusion helps to minimise undue forces on the composite.

#### Superior handling properties

I have used the Venus range of composites exclusively for a number of years – due to their superior handling properties and outstanding results. For this case, I chose to use Venus Pearl. It gives high aesthetic

## All-embracing Ortho360 theme for #BOC2018

The British Orthodontic Conference (BOC) in 2018 aims to offer a comprehensive overview of the orthodontic speciality showcased over three days in the QE11 Conference Centre with 360° views over London.

Taking place from 27 to 29 September, the conference – with its Ortho360 theme – will reflect the interdisciplinary work between orthodontists and members of other dental specialties, as well as the work of all the different team members.

An innovation for this year will be a series of short, dynamic talks focused on the world of orthodontics. Conference chairman, Richard Jones, said, "TED Talks have taken the business world by storm and we will be offering our own version with a series of presentations on Treatment, Education and Design."

"We are delighted to be holding BOC in London for the first time and hosting some top international speakers, including David Sarver and Willie Dayan, as well as top home-grown talent. The Northcroft lecture, always a high point of the conference, is to be delivered by Professor Martyn Cobourne whose cutting-edge research at King's Dental Institute is consistently fascinating."

For anyone considering booking for BOC for the first time, the feedback of delegates in previous years is inspirational.

BOC in 2017 delivered on its aim, with more than 75 per cent of delegates who gave feedback saying that the conference changed their clinical practice.

New graduates made comments such as, "The conference confirmed my passion to pursue orthodontics."

Practice owners were inspired to invest in new areas of orthodontics, while many clinicians said they wanted to embrace new techniques such as TADs and digital technology and lingual systems.

Richard continued, "Our feedback demonstrated that many colleagues are inspired to make important investments to help develop their practices while they are at the annual conference. This is an event which is good for the whole team, including our highly valued suppliers."

He said he and his committee plan to exceed the high standards they have achieved in Brighton in 2016 and Manchester in 2017.

"We are optimistic that with London as the venue and the all-embracing Ortho360 theme, we will have the opportunity to inform and inspire the hundreds of colleagues who count on BOC for their verifiable CPD."

You can watch a new video on the BOS website that gives a taste of the 2018 annual conference. Go to [www.bos.org.uk/News-and-Events/Events/BOC-London-2018](http://www.bos.org.uk/News-and-Events/Events/BOC-London-2018)