The double arch impression technique

The Double Arch or Dual Bite Impression Technique is an alternative to full arch impressions. Using a rigid tray and 3M™ Imprint™ II or 3M Imprint II Quick Step Impression Material the occlusal relationship, the prepared teeth and the opposing arch can all be captured in one impression. It is essential that the patient is able to close fully into centric occlusion without interference by the tray. 3M Imprint II Quick Step has an even faster set than 3M Imprint II allowing the clinician to work quickly and efficiently while keeping the patient comfortable.

The upper left first molar had been treated endodontically and was restored with a large posterior composite. We decided to fabricate a cast post core and crown to reduce the potential for crown fracture.

The buccal view of the molar shows the occlusal scheme. Note the distal cusp of the maxillary first molar is ‘hanging’ into the embrasure between the two mandibular molars, a situation that creates very heavy occlusal loading on the maxillary molar and a high potential for fracture.

The material was easily dispensed directly from the cartridge on to the preparation. The intraoral tips provided good intraoral access and allowed the material to flow directly into the sulcus. The wash material is drip resistant and stayed where it was placed. 3M Imprint II Quick Step’s rapid setting time made a significant difference in our approach to crown and bridge.

The orange and green colour allowed us to easily read the margins. The material has excellent elastic recovery, high tear strength and dimensional stability when set. There was excellent reproduction of detail on both sides of the tray. The thin white areas are areas of occlusal contact with the opposing arch.

A three-section cast post core restoration was fabricated and cemented into place. The casting was fabricated from an impression using the Temrex Bite Relator 2000 dual arch tray and Imprint II Quick Step material. Our patient, who had just had another crown completed using Imprint II, noted how quickly this new material set. He found two-minute intraoral set was very comfortable and easy to cope with.

The crown is tried in and cemented. The quick set maximized our time and made a noticeable difference to our patient. Saving two minutes may not seem like much time but in taking impressions on gagging or apprehensive patients, this is significant. Accuracy, speed and ease of use are the significant features of this material. It is ideal for the dual bite or double arch impression technique.