What makes a good complete denture?

Justin Stewart discusses four areas to focus on when creating a complete set of dentures and offers tips for making the best set possible

Creating excellent dentures requires attention to detail

With dental universities cutting back on the removable prosthetic curriculum, it seems there are fewer dentists who take a dedicated interest in denture-related work, which can result in poorly constructed and ill-fitting dentures. Implementing a routine system with distinct areas to focus on will generate better functional and cosmetic solutions. By ensuring there is a high standard in each area of focus, dentists can guarantee a secure, cosmetic denture.

Four areas of focus are: the fit surface of the denture, the bite, restoring the facial height and the position of the teeth. The following is particularly true for complete dentures and extensive partial dentures:

1. The fit surface of the denture will be more accurate by taking a functional impression. The key part is border moulding and getting the patient to make mouth movements, which removes the guesswork relating to how deep the flanges need to be. TIP: Look down on a full lower impression and look for an ‘S’ shape. If it is not there, double-check the impression, as it is usually present.

2. When a patient closes, the bite may appear to be correct, but often it is not, as their lower jaw is posturing forward to get to maximal intercuspation, but this is not the retruded jaw position. There are a number of ways of procuring the correct bite; arguably, an intraoral gothic arch tracing is the most accurate technique. TIP: At the try-in stage, have the patient bite on cotton wool for 30 seconds, and observe the patient closing gently, looking for premature contacts.

3. With dentures where the vertical height is less than it should be, it is difficult to get the correct cosmetic result. The vertical height is fundamental to achieving the best cosmetic result. Also, if the teeth are not as forward as they should be, the lips and cheeks will look collapsed. TIP: Slighty overbuild the facial support, as over the first two to three weeks, the facial musculature falls further around the dentures, and patients may feel not enough of their teeth are showing.

4. Getting the patient to supply old photos of themselves with natural teeth is helpful. Generally, the denture should follow the natural skeletal class of the patient. TIP: It is almost impossible for the technician to get the cosmetics of the denture correct at the lab bench. Dentists should be encouraged to move the teeth themselves at the wax try-in which is usually fun to do.

Creating excellent dentures require attention to detail. Any dentist taking on a full-mouth reconstruction would spend a lot of time making sure that every stage of treatment was carried out correctly. That same attention to detail should be applied to complete denture reconstruction.

Not only does the patient have a perfect smile, but they also feel more confident. The focus on the facial area is as important as the teeth themselves. The patient can also fall in love with the cosmetic result, which makes the denture more successful in the long run.