

## NEWSLETTER SEQ DENTAL SPECIALIST

### Implant Supported or Retained Dentures

Welcome to the February SEQ Dental Specialist Newsletter. I trust you had a fantastic break and managed some time away from your practices. This month's topic is on full arch implant supported restorations. As always, if you have any questions, are after treatment planning advice or mentoring through a case please drop us a line as we would love to help out.

Once a patient has decided to replace their teeth using implants I find the next question to be asked is what kind of denture or prosthesis sits on top of these implants?

There are essentially two types of dentures that can be attached to implants, fixed and removable. I find patients basically ask two major questions in relation to these options, aside from the obvious cost question.

#### **1. Can I take them out?**

Fixed dentures (such as all-on-4 or similar) are when the entire prosthesis is screwed (or cemented) onto the implants or abutments. These fixed dentures can be made of resin (plastic), ceramic or metal-ceramic. A strong ceramic such as zirconia or PFM is highly recommended because they wear better than the resin-based dentures. However, cost can often be a factor in this choice. The upside is that the resins can be repaired a lot easier and at a significantly reduced cost to the patient than the ceramics.

If the denture is screwed onto the implants only a dentist can remove and re-attach the appliance. This provides the patient a lot more confidence with chewing but the downside is they can be a little less aesthetic as you can't have a denture flange to hide the abutment collars. Removal will be necessary on a regular basis so as to allow professional cleaning around the implants or to re-adjust or clean the denture base. These costs can become significant and need to be factored into the maintenance care regime discussed with the patient.

Removable dentures have different connectors between the implants and dentures. In the past bar connections (e.g. Dolder bar) were very popular but required a lot of vertical space for all the components. Due to the high manufacturing costs of the bars, they have generally been superseded by the locator, ball attachments or telescopic crowns. Bars have the same cleaning requirements of the fixed appliances above but can be designed to be a bit more user-friendly.

Locator and ball attachment work like buttons clicking onto the implants, as do my preference of precision telescopic crowns. Most attachments have plastic sleeves or inserts, which wear out after 1 to 2 years and need replacement. Again, these replacement costs have to be discussed with the patient.

Removable devices are often 'retained' by the implants while being 'supported' predominantly by the mucosa tissues as well as the implants. This means that relines will be required for these devices similar to that of traditional removable dentures to keep the tissue support accurate.

One thing that is often overlooked in deciding between fixed and removable is the cosmetics of the case. We seem to always aim for fixed prosthetics, however aesthetics of the removable dentures are far superior as total control over the teeth, gingival margins and denture flange can be achieved. Beware the patient with high aesthetic demands.

## **2. How do I clean them?**

Fixed implant supported dentures are harder to clean and require excellent patient hygiene. It may seem obvious but physical dexterity (e.g. arthritis) and eyesight is mandatory components for this. The use of super-floss around implant abutments in the posterior regions can be a challenge if not impossible and if gingival swelling is present and extremely painful. Good design of the prosthesis allowing space for inter-proximal brushes and flossing will help your patient with this.

At this point in time we are also unsure as to how often we should be removing a fixed prosthesis to professionally clean around the implant abutments. The current thoughts are around 12-18 months and there is not much scientific evidence to back this up. The prosthetic screws should also be replaced but recommendations on how often they can be re-used vary. I think it's better to replace them than to risk stripping the implant screw threads.

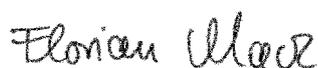
When it comes to repairing and cleaning the professional maintenance costs of fixed dentures can be a lot higher whereas the costs for replacement component parts for removable can also mount up.

Worn out sleeves have very little retention. Sometimes they don't engage because food is not completely removed from the sleeves. Patients need to be shown how to brush and clean these areas so as to reduce the wear and tear on these components otherwise they will frequently present to your practice complaining that their new expensive teeth keep falling out.

As always, if in doubt give us a call and I can help with the design and planning of any implant case you have.

SEQ Dental Specialist is happy to mentor and guide you through the process from start to finish with you doing as much or as little of the treatment you feel comfortable with.

Most importantly, getting the planning right is the first step for putting you on the right path for success.



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