Dental Implant Maintenance

Information for Dentists, Therapists and Hygienists

I recommend that all patients with dental implants should attend for annual reviews with an implant trained dentist. This review consists of six point pocket charting around their implants with a plastic Williams probe to assess for bleeding and changes from baseline records. Implants are also reviewed radiographically and the occlusion monitored closely for changes that may impact the long term health of the implant, restoration, and surrounding teeth.

That said, it is the responsibility of all clinicians to monitor the health of their patients including any tooth replacements such as dental implants at their routine examinations. I recommend a minimum of two appointments with a hygienist for all patients with dental implants, principally to ensure an effective home oral hygiene regime.

As with all health problems, prevention is best but early detection is paramount for successful treatment.

Peri-implant tissues

The tissues around dental implants are susceptible to inflammation in a similar manner to periodontal tissues.

Peri-implant mucositis

Reversible inflammation with bleeding on probing, similar to gingivitis. Treatment involves biofilm removal and oral hygiene instruction. Oral hygiene instruction should have been given to the patient at the time of restoration fit, this always includes twice daily brushing, ideally with an electric toothbrush, plus the daily use of either interdental brushes (size may need to be reviewed periodically), floss or a water flosser. Visible plaque deposits should be gently removed, ideally with a single tufted brush, air abrasion with glycine or a fine prophy paste. Irrigation with saline should also be considered. Routine probing, hand or ultrasonic debridement around implants is not necessary and may in fact scratch or damage the implant or abutment, leading to increased plaque accumulation.

Peri-implantitis

Peri-implant bone loss, often with suppuration, similar to periodontal disease. This is much more difficult to treat, often requiring surgical intervention with poor success rates. If any bone loss or suppuration is identified, the patient should be referred for assessment.

Occlusion

Occlusal overloading can lead to bone loss, component fractures or screw loosening. Dental implants do not have periodontal ligament fibres surrounding them, rather they are integrated rigidly in the bone. When biting firmly as the periodontal ligaments around the natural dentition compress implants can easily be overloaded. Patients who are liable to parafunction will have been given counselling on this and provided with either a soft bite raising appliance or a stabilisation splint to be worn every night. Please monitor for occlusal changes at routine examinations for either new tooth wear or parafunction which may lead to occlusal overload. For a single implant opposing a natural tooth, shimstock foil should be removable in light ICP contact over the implant crown and held in heavy biting.

Other common issues

Loss of screw channel cover

Most implants are restored with screw retained crowns, where a single screw holds the crown and abutment onto the implant, this screw channel is then filled with PTFE tape and sealed with composite. If this small composite restoration is lost, it can be replaced in general practice. Irrigated the screw channel with saline or chlorhexidine, replace the PTFE tape if contaminated or lost (cotton wool can be used instead), seal the screw channel with 2mm of composite.

Screw loosening

Occasionally the screw holding the crown can become loose, often due to occlusal factors. If you or your patient notices their implant crown is loose, please refer them to an implant dentist to retighten it or replace the screw. This usually required no anaesthetic and only takes a few minutes.

Crown debond

If the crown has been cemented on the implant, from time to time it can debond, like a crown on a natural tooth, again frequently due to occlusal factors. It is imperative that no cement is extruded subgingivally as this can lead to peri-implantitis I therefore advise you to refer the patient for an implant dentist to recement the crown. Again this is usually a short appointment without LA.

If you are unsure, it's always best to seek an opinion. A clinical photograph and a radiograph will provide enough information to decide whether an appointment with an implant dentist is necessary.