

# IMPLANTS IN FOCUS

## CARE PLANNING FOR DENTAL IMPLANTS: THE ROLE OF THE HYGIENIST

**Implant specialist Ian Seddon explains the key post operative care role played by hygienists in implant work**



Ian Seddon

**D**ental implants are now a common sight in general dental practice and increasingly the maintenance of these restorations falls to the hygienist at the practice. In parallel to this, disease around dental implants has become more commonplace. Undergraduate and postgraduate training for hygienists is not easy to obtain so this article aims to provide

*Ian Seddon is principal and Clinical Director at Seddon Dental in Cardiff and has been placing and restoring Dental Implants since 1994. He also runs courses on implants and mentors other dentists.*

a basic overview of initial care planning for dental implant patients. It is anticipated that hygiene maintenance of implant restorations and treatment of a failing implant will be covered in a subsequent article. It should be remembered however that referral to a more experienced practitioner; dentist, hygienist or periodontist is always an option where a hygienist feels treatment of a problem is outside their area of skill.

### ORAL HEALTH

It is a commonly accepted protocol that all implant patients see a hygienist for regular three month review, as the major factor in the success or failure of implant restorations is good oral hygiene and the control of any periodontal pathogens. Many implant patients have previously suffered with periodontal disease and studies identifying the bacteria in peri-implantitis site show the same micro-organisms as are seen in the periodontal pockets. This suggests that inoculation of the implant site may be from adjacent dentate beds.

Other studies in all arenas of dentistry show excellent results when hygiene is impeccable but real world experience over 23 years in

clinical practice show my patients are less motivated than this when it comes to the 'long haul'. Frequent examination and occasional 're-focussing sessions' therefore must form a fundamental part of any maintenance programme.



It's helpful for the hygienist to take time to discuss the treatment with the patient

### PRODUCTS USED

TeePee brushes

Superfloss

Braun electric toothbrushes

Waterpik

CONT

Lastly, all implant dentistry starts from a compromised position; teeth have been lost and possibly hard and soft tissues too. Techniques of hard and soft tissue reconstruction are much more widely practiced and effective but cosmetic demands and expectations have also risen. The health / aesthetic see-saw is a concept where to improve the appearance of a restoration it is necessary to reduce the cleansability; conversely, to improve the patient's ability to clean compromises the cosmetic result. In many cases aesthetics win out and this makes long term care and maintenance more difficult and so the importance of developing a personalised hygiene plan is raised.

### POST TREATMENT REVIEW

The first point of contact with the implant patient for the hygienist may well be the post-treatment review. This appointment is scheduled about a week after implant restorations have been fitted.

It is helpful if the hygienist takes a little time to discuss the treatment the patient has undergone and ask questions about how smoothly the treatment progressed, if the patient encountered any complications, how they felt about the surgical and restorative stages, would they recommend this treatment to a relative or friend. This is all valuable information to feed back to the surgical and restorative teams and could help them improve their care delivery in the future.

Radiographs should be available at this appointment, ideally showing the area before, during and after completion of the restoration. This will allow the area to be assessed for cement residues and serve as a baseline for future reference. It may also highlight areas which may be difficult to clean and maintain.

A clinical examination should encompass a general overview of the shape of the restoration; is it of similar form to the adjacent teeth, larger or smaller? How does the restoration emerge from the abutment, are there any ledges, open interfaces or mis-fits?

The gingival interface should be gently probed with a plastic round ended probe to detect any cement residues. If any are found

they should be removed using a plastic or titanium instrument, the area left to heal and reassessed a couple of weeks later.

The shape of the surrounding tissues should be assessed with particular note being made of the amount, character and thickness of attached mucosa around the abutments. This has been shown to be a significant factor in the long term success of implant restorations. Similarly any areas of thin and friable mucosa should be noted as these may be painful to clean, susceptible to damage and provide less of a barrier to bacterial ingress.

Sometimes where hard tissue reconstruction has not been attempted or has been not completely successful there may be 'hamster pouches' around the cervical neck of the restoration which will funnel and accumulate food residues. If these are noted then they should be incorporated into the patient's personalised hygiene plan (PHP).

The surgeon or restorative dentist may have undertaken elaborate soft tissue reconstruction and if this is the case then again it should be noted and incorporated in the PHP as these areas may recede or collapse if cleaning is inefficient or over-vigorous.

Alternatively access holes may have been provided to facilitate easy cleaning. If this is



A clinical examination should encompass a general overview of the shape of the restoration



A hygienist using a plastic periodontal probe. It is important to use not metallic instruments around implants to avoid contaminating the titanium surface





This image shows a full arch upper restoration and good perio health in the lower



Peri-implantitis around an implant

the case the position and sizing should be noted, using interdental brushes as a reference point. These can be an invaluable aid but can also be 'tucked away' to minimise their cosmetic impact. It is vital therefore that if present they are not missed or forgotten and are built into the PHP.

### THE PERSONALISED HYGIENE PLAN

Once all this information has been acquired and noted, it is then possible to devise a PHP for the patient. This should be a set of instructions and recommended aids to allow the patient to effectively clean their

restoration. Though it needs to be comprehensive it should also be easily understood by the patient. It is then important to carefully go through the plan with the patient in a step by step manner. Access holes may be tricky to engage and the patient may not have the manual dexterity to carry out the required movements.

In this case an assessment needs to be made as to their ability to learn or alternatively if the plan needs to be modified.

### RECOMMENDED AIDS

For single teeth and small span bridges, TeePee brushes form the cornerstone

of our PHP's, together with Superfloss. This combination offers maximum cleansability for minimum skill and time. It is important that the specific size (colour) of brush is noted on the PHP and that this may not be the same for each area.

For full arch bridges we recommend Braun electric toothbrushes and water polishers to dislodge food debris. Although purists may frown at the use of these, patients seem to find them extremely effective as a first 'rinse cycle' before moving on to the more conventional brush/floss/TeePee phase. It should be noted that they can be somewhat messy to use in the

initial learning stages and patients may find it easier to use them in the shower until they become more proficient.

### WARNINGS

Once this has all been satisfactorily demonstrated and the patient is ready to move forward, the final stage of this initial appointment is to provide or reinforce the warning signs that the patient needs to be on the look out for. Noting issues with an implant restoration early can mean that reparative or correctional treatment is simple and minimal.

Broadly speaking complications come in two forms; hygiene and mechanical. Mechanical issues include screw loosening or fracture, porcelain or acrylic fracture, attachment wear and tear and crown or bridge decementation. It goes without saying (but say it anyway) that if the patient notices anything moving that didn't move when the restoration was fitted that they need to see their dentist as a matter of urgency. When attachments wear, they can often be easily replaced with minimal inconvenience with modern restorative systems.

In hygiene terms patients should be warned that if they notice bleeding on cleaning in the absence of recent trauma that it is sensible to get the area checked by their dentist or hygienist. Other signs that merit further attention are bad smells or tastes from the restoration, discharge, puffiness or tenderness of the gums around the area, gum recession or gum hypertrophy.

Hopefully this scheme will help hygienists inform, teach and help patients to maintain their implant restorations and allow them to have a trouble free exposure to dental implant treatment. The importance of regular review thereafter cannot be over-emphasised and it is anticipated that this will be covered in a subsequent article.

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