



OCEAN
SURGICAL Pty
Ltd



Implants

Full Lower Denture Support

Dental implants are titanium appliances designed to replace missing teeth. They have an outer surface which integrates with alveolar jaw bone, and an inner surface into which screws and appliances can be attached to support tooth crowns and denture frameworks.

Implants are a relatively new surgical means of fixing dental appliances directly to your living, natural jaw bone. Based on technology used in orthopaedic surgery, titanium dental implants have similar design elements to knee or hip joint prostheses.

Only qualified, medically trained, specialist Maxillofacial surgeons have the skills and facilities to provide a comprehensive way of managing your bone, soft tissue and titanium implant needs. Surgery is provided in combination with a specially trained implant-restorative-dentist who ultimately designs the implant-retained locking devices, and fits your new final denture.

Titanium implants offer the most conservative and long term means of retaining your lower denture, and to dramatically improve your chewing ability.

WHY USE IMPLANTS TO RETAIN YOUR LOWER DENTURE?

When you lose teeth, the bone surrounding what were the tooth roots, eventually resorbs away. This alveolar-bone-loss severely affects the retention and comfort of your lower denture.

As bone resorbs away, and comfort diminishes, new dentures are made or relines are performed to maintain both denture stability and chewing ability. Eventually so much jaw bone resorbs away, that dentures spontaneously fall out; chewing, biting and normal eating becomes impossible.

By placing implants into your jaw bone, *three important events occur.*

Firstly, implants stimulate surrounding bone, like natural teeth, and this leads to less local bone resorption as implants are used.

Secondly, as implants fix dentures, the mandible as a whole is also used more, leading to less general mandible resorption and facial muscle wasting.

And *thirdly*, because dentures also partially lift the denture off the underlying gum and nerves, pressure resorption and nerve compression pain (mental nerve neuralgia) underneath the denture becomes much less.

The most important benefits of implant supported dentures are improved denture-retention and dramatically increased chewing ability.

Ageing and being aged makes us vulnerable. With increasing medical problems, greater pharmaceutical use and decreased mobility, the increasing reliance on a stable nutritional intake is something which is threatened by loss of masticatory and denture function.

A varied diet is important for health. A range of flavours, cooking styles and textures makes eating pleasurable. The

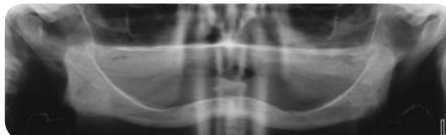
basic act of chewing is an important part of eating, and one that most dentate and young people take for granted.

Dental titanium implants are the most cost-conservative and long-term means of sustaining a stable, functional and retentive denture. The Maxillofacial Surgeon works with your implant-restorative-dentist to design the ideal denture to suit your anatomy; and ultimately to produce a functional chewing end-product.

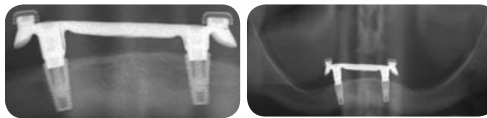
Only a dedicated, multi-disciplined specialist team can coordinate your care to a degree where the final denture and associated surgery is cost-effective, clinically stable and maximally functional.

Implant supported prostheses are not for everyone. You should carefully discuss your treatment options with your general dentist, or specialist Maxillofacial Surgeon. It is important that you gain as much information as possible before you embark on any treatment régime.

CASE 1. 68 YEAR OLD LADY PRESENTS WITH IMPOSSIBLE-TO-USE LOWER DENTURE, SEEKING IMPLANT SUPPORT



Extreme bone loss has occurred since all teeth were removed 40 years previously. The result was a pencil thin mandible. At 68, this patient was no longer able to wear or use her lower denture.



X-ray (OPG) shows 2 titanium implants placed either side to central chin. Both implants support a common titanium bar, fitted with terminal locator buttons.



Final implant-supported custom-laser-welded-titanium-bar lying above gum tissue, and behind lower lip; with 2 terminal locator-buttons to formally fix the lower denture. The terminal locator buttons on the titanium bar 'clip' into custom locator-O-rings embedded into the underside of a custom made acrylic denture.



Underside of denture seen showing embedded locator O-rings. With the denture in the mouth, it is securely "locked" and able to take significant biting and chewing forces.



Following six months from her initial presentation, the client came away with wearable dentures. Most importantly, they were retentive and functional. Because of significantly improved stability and absolute retention, the denture could be bulked out to allow for natural lower lip fullness, and reduction of local lip creases.

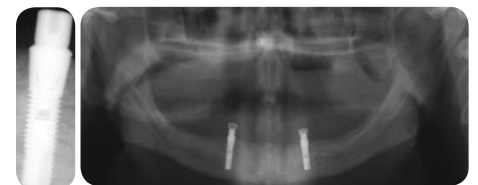
CASE 2. 52 YEAR OLD SMOKER WITH SEVERELY DECAYED TEETH REQUIRING FULL LOWER DENTURE



This 52 year old engineer required removal of severely decayed lower teeth, and replacement with a functional secure lower denture. Implant abutments shown with ball attachments.



O-ring attachments beneath full lower denture



X-rays showing precision attachments bolted to embedded (osseo-integrated) implants. Use of two implants with precision ball-type attachments allows for clip-on, click-off control, with dramatically improved denture retention

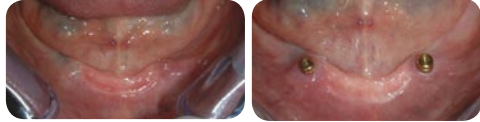


Following 4 months of osseo-integration, final result shows a full complement of natural appearing teeth, with full retention of lower denture, allowing chewing of most food consistencies.

CASE 3. 83 YEAR OLD FEMALE WITH EXTREMELY LOOSE FULL LOWER DENTURE REQUIRING IMPROVED RETENTION FOR EATING



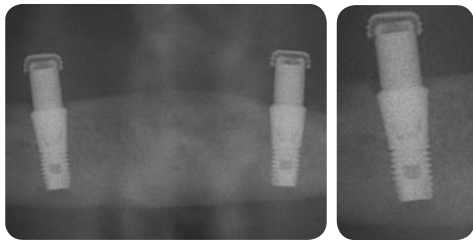
Comparison photos of before and after showing placement of two lower implant supported precision attachments in the lower jaw. Treatment difference is three months.



Extremely resorbed lower jaw is unable to retain a full lower denture. Two precision attachments are shown which enable stable securement to the underside of the new lower denture.



Views of underside of lower denture, showing O-rings, which "click" onto the implant supported precision attachments



X-rays showing relationship of embedded implants to bone. Structures above bone are the precision attachments, with the "hat" representing the O-ring "clips" which are embedded within the denture.



Final appearance of denture secured in mouth. Foods consistencies improve, with near full functional chewing achieved.

IMPORTANT POINTS ON IMPLANT-SUPPORTED FULL DENTURES

1. Implants are a stable, long-term solution to retaining removable full dentures.
2. Dentures normally become loose as underlying bone resorbs with ageing & tooth loss.
3. The pattern & number of implants required to support dentures vary from patient to patient. Surgical planning varies according to individual anatomy, personal finances, and retention-stability requirements.
4. Biting forces increase dramatically with use of retention devices locked onto osseo-integrated titanium implants.
5. Treatment spans vary from 6-12 months, & there are discreet healing periods where temporary dentures may not be worn at all.
6. Elderly patients with chronic medical disorders may be eligible for placement onto Enhanced Primary Care (EPC) programmes. With EPC you may benefit from substantial subsidies on your implant surgery & denture provision... Through Medicare.
7. Only your Maxillofacial Surgeon and implant-restorative-dentist can coordinate your overall rehabilitative occlusal needs. Many (but not all) aspects of your care are Medicare or Federal-tax subsidised.
8. With a referral by your medical GP, your initial consultation and baseline x-ray (OPG) are bulk-billed by the Maxillofacial surgeon.
9. It is important to check the credentials of your clinician to ensure that you are appropriately clinically managed, & are not missing out on potential Medicare subsidies.
10. Certain chronic medical conditions such as bisphosphonate use, heavy smoking and uncontrolled diabetes may be contra-indicated for implant surgery. You should discuss your medical condition carefully with your surgeon before embarking on any surgical course.
11. Implant placement surgery is usually conducted under local anaesthetic in specially designed surgical suites. Post-operative courses are usually pain, swelling & bleeding free.
12. There are risks and complications with all types of surgery, and you should carefully discuss all such appropriate risks with your surgeon.