

Dental implants: it's not as easy as it looks

A few months ago, I was on a course listening to a lecture from a very well known specialist, a true leader and innovator in his chosen speciality. He was discussing the complexity of his speciality and how many years were needed before one can become truly proficient, he went onto

say "...it's not like placing dental implants, where you can go on a weekend course and learn all you need. To treat these kinds of cases requires years of training and experience." I was a little taken back by his attitude towards implant dentistry; in fact I would go as far to say that I find comments

such as these quite belittling. They usually come from dentists who have never placed nor attempted to restore implants before.

Don't let the implant companies fool you; it is a challenging and demanding area of dentistry. It encompasses both

the surgical and the restorative envelope and to be a good implant dentist one must be a good surgeon, a good communicator, a good restorative dentist, a good prosthodontist, the list goes on and on. Yes, anyone can place dental implants without too much trouble, but that's akin to me saying that

anyone can stick an orthodontic bracket on a tooth, yes that's true, but just because you can do that, doesn't mean the final result will be a good one.

Below is a typical multi-disciplinary implant case which I have treated. The aim is to show that implant dentistry is not just about making a hole and putting a screw in, there is a great deal of planning and preparatory work carried out before this can happen.

This lady has suffered with TMJ pain ever since a nasty fall in a local shop a few years ago. She has limited opening and is very nervous about her teeth. She recently lost her UR23 and came to see me for an implant solution. As you can see from the initial photos she was over closed with an almost traumatic bite in the UR23 region. Her lower incisors were heavily worn and sensitive, with a number of occlusal issues. Her medical history was clear and she was a non smoker. After a long discussion we arrived at the following treatment plan:

- 1 Full case diagnosis with articulated study casts and wax ups
- 2 Assessment of the UR23 edentulous area with a CBCT scan
- 3 Augmentation the UR23 implant sites with a piezo surgery device
- 4 Carry out implant placement under iv sedation in the UR23 area
- 5 Restoration of the occlusal vertical dimension with composite build-ups
- 6 Develop favourable soft tissue outline using a partial denture and fixed temporary bridges
- 7 Fabricate and fit a permanent 2 unit e.max bridge

The patient needed some pre-implant surgery to reduce the height of the bone crest in the UR23 region coupled with opening/restoring of her OVD to create sufficient space to accommodate the implant-abutment/ceramic restorations. The necessary height was judged using a Galileos



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Fig 1 Initial presentation



Fig 2 Lack of vertical space

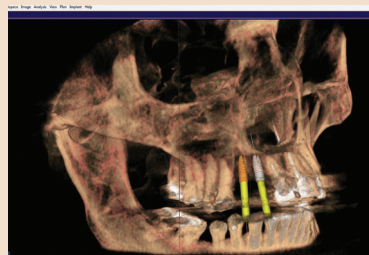


Fig 3 CBCT image

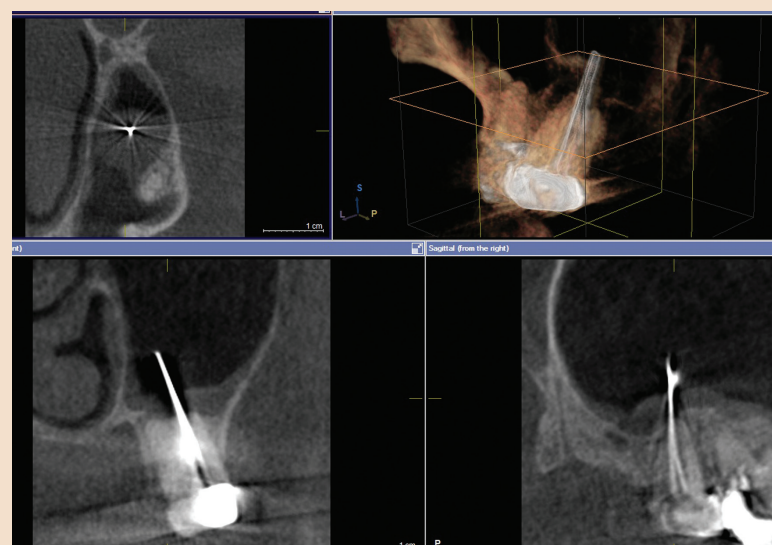


Fig 4 CBCT image to show silver point filling into sinus

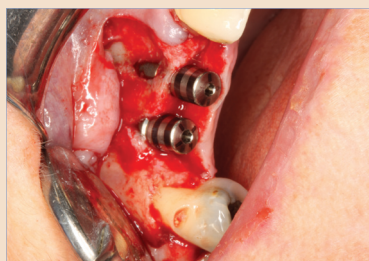


Fig 5 Implant placement

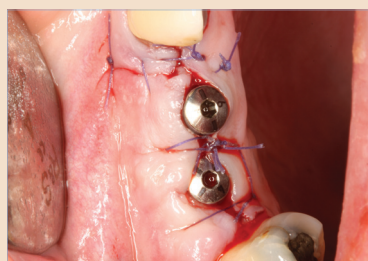


Fig 6 Closure of implant site



Fig 7 2 unit composite temporary bridge, note the restoration of the vertical dimension



Fig 8 Soft tissue profile after 2 months with the temporary bridge removed



Fig 9 Atlantis Zirconia abutments

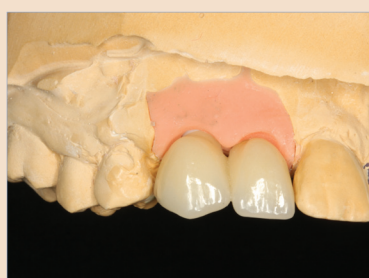


Fig 10 2 unit e.max bridge



Fig 11 Abutments in-situ



Fig 14 Final bridge at fit, note soft tissue profile



Fig 12 Final bridge cemented in place



Fig 13 Occlusal view of temporary bridge

scan and virtually placing the implants and abutments with a CEREC over-lay. This enabled me to assess how much height would need to be obtained by reducing the bone height and increasing the vertical dimension.

An interesting incidental finding was a previous silver point root filling in her UL7 appears to have exited her root apex, through the alveolar bone and projects up to 2cm into her maxillary sinus. The patient was unaware of this, and has never had any symptoms from this tooth. The CBCT was sent to a Consultant Oral Maxillo-facial radiologist who recommended leaving the UL7 alone and only investigating it if the area becomes symptomatic. If the UL7 needs extracting in the future, removal of the silver point filling through the tooth first could be attempted.

Due to her TMJ problems, I was reluctant to increase the patients OVD by very much. I

began by opening her bite by a few millimetres and seeing how she coped. One of the benefits (or some might say downsides) of implant dentistry is that it can take months before the implants are ready to be loaded. In cases such as these, its during this time where I concentrate on restorative issues, and carry out any other necessary forms of treatment. Fortunately, she did very

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well and thinks it may have even reduced her TMJ discomfort. This may mean that part of her TMJ pain was caused by her over-closing and subsequent loss of vertical dimension.

We elected to place the implants under IV sedation. Although this lady wasn't an especially nervous patient, she struggled to maintain a normal opening for any length of time.

Once she was sedated, she was much calmer and managed to maintain a very reasonable level of mouth opening for the duration of the surgery. Two Astra Tech Osseospeed TX implants were placed achieving very high primary stability.

The area healed without complication and after 2 months a 2 unit composite temporary bridge was made.

This allowed us to assess aesthetics, soft tissue profile, occlusion, and phonetics. A few alterations were made in the final bridge which comprised of two Atlantis Zirconia abutments and a 2 unit e.max bridge.

The patient was delighted with the final result and will be seen by me every 6 months for examinations and regular

NILESH R.PARMAR Surgical Instrument Kit

When I first started placing dental implants in practice, I wasn't sure which instruments I would need. Yes, I had placed implants in hospital, and was aware of the retractors, elevators etc that were used, but that was all I knew. So when I told my local rep I wanted to buy some surgical instruments I was a little bit confused by the variety. Over the years, and on my travels, I have picked up instruments of all shapes and sizes, some are fantastic, and some are useless. Recently, I have been asked by dentists who are new to implants, to send me pictures of my surgical kit so that they could duplicate my chosen instruments. This had developed into me forming a partnership with Hu-Friedy to design and produce my own Implant Surgical Kit. The NILESH R.PARMAR Surgical Instrument Kit is comprised of 31 instruments in 2 cassettes which are everything a dentists needs for simple to moderate implant cases. I have been using these kits for a few months now, and am very impressed with the quality and lightness of the Hu-Friedy instruments.

Available from most dental dealers, Hu-Friedy also has a huge range which you are welcome to substitute and amend to whichever variation of instruments suit your clinical work best.

About the author



Dr Nilesh R. Parmar Dr Nilesh R. Parmar BDS MSc MSc was voted Best Young Dentist in the East of England in 2009 and runner up in 2010. He was short-listed at the Private

Dentistry Awards in the category of Outstanding Individual 2011. Nilesh has master's degrees in Prosthetic Dentistry from the Eastman Dental Institute and a master's degree in Clinical Implantology from Kings College London. Nilesh is one of the few dentists in the UK to have a degree from all three London Dental Schools and is currently studying for his 3rd MSc in Orthodontics. His main area of interest is in dental implants and CEREC CAD/CAM technology. Nilesh runs a successful 5 surgery practice close to London and is a visiting implant dentist to two central London practices. Nilesh was voted the 8th Most Influential Person in UK dentistry by Dentistry Magazine 2012, the youngest person in the Top 10. Nilesh regularly speaks for national and international meetings including The Dentistry Show 2012 Future Dentist Conference, the IDA in Jaipur and for Sirona in Germany and the USA. His direct and easy-going presentation technique makes him a sought after speaker in Europe. Nilesh has a never-ending passion for his work and is famed for his attention to detail and his belief that every patient he sees should become a patient for life. He offers training and mentoring to dentists starting out in implant dentistry, more information can be found on his website. www.drnileshparmar.com