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.
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, re-symptomatic. If the UL7 needs re-symptomatic. If the area becomes symptomatic, and carry out any other necessary forms of treatment. Fortunately, she did very well and thinks it may have even reduced her TMJ discom-fort. This may mean that part of her TMJ pain was caused by her over-closing and subsequent loss of vertical dimen-sion.

The area healed with-out complication and after 2 months a 2 unit composite temporary bridge was made.

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

This allowed us to assess aesthetics, soft tissue profile, oc-clusion, and phonetics. A few alterations were made in the final bridge which comprised of two Atlantis Zirconia abut-ments 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 hygienist visits.

As you can see, this is just a brief synopsis of what was carried out, making the hole and placing the implants is only part of the overall treatment. It’s not as easy as it looks....

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 surgi-cal 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 surgi-cal 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.

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

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Dr Nilesh R. Parmar BDS MSc was voted Best Young Dentist in the East of Eng-land in 2000 and runner up in 2010. He was short-list-ed at the Private Den-tist 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 Col-lege 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 im-plant dentist to two central London practices. Nilesh was voted the 5th Most Influential Person in UK den-tistry by Den-tistry Magazine 2012, the youngest person in the Top 10. Nilesh regularly speaks for national and in-ternational meetings including The Dentistry Show 2012 Future Dentist Conference, the IBD in Japan 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 nev-er-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 monitoring to den-tists starting out in implant dentistry. More information can be found on his website. www.dentalsurgerycentre.com

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 Closure of implant site

Fig 6 Abutments in-situ

Fig 7 2 unit composite temporary bridge, note the restoration of the vertical dimen-sion

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 12 Final bridge cemented in place

Fig 13 Occlusal view of temporary bridge

Fig 14 Final bridge at fit, note soft tissue profile

Fig 15 Occlusal view of temporary bridge

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