

Multi-disciplinary treatment case report

Nilesh Parmar explains how he treated this patient who required implant and teeth whitening procedures



Initial presentation



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Pre-whitening with UR1 implant and healing abutment in-situ



Post-whitening with UR1 composite temporary implant crown



Stump shade at prep appointment



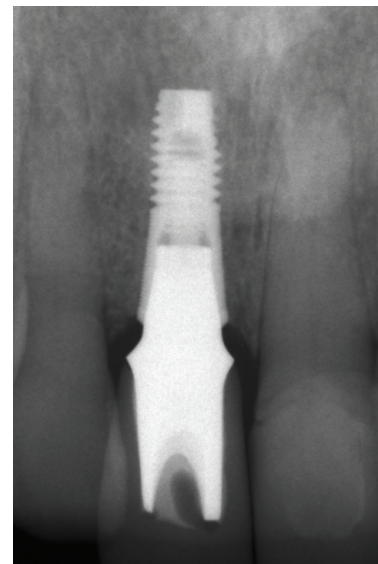
Fit appointment



Before



After (note papillae formation between 1/1)



Fit apt LCPA of implant showing bone levels to the implant shoulder

Patients often present with a multitude of dental problems. Usually, these problems do not fall solely within one dental speciality, requiring a multi-disciplinary treatment approach. In my experience, most of my treatment plans tend to include hygiene therapy and tooth whitening. Previously, tooth whitening involved a lot of surgery time, such as the in-office procedures which needed dentist supervision. Recent developments and techniques have reduced a lot of the guess work involved with tooth whitening, making it a predictable, safe and easily administered treatment.

Case report: 'I want my smile to look better'

This lovely man came to see me because he had recently lost his UR1 due to trauma in the workplace. The patient was wearing a partial acrylic resin denture which he found unacceptable. He was certain that he wanted an implant

solution to the missing UR1 but was aware that his smile needed some cosmetic improvement. Clinical examination revealed a moderately restored dentition with good oral hygiene. The UL1 was crowned several years ago and was asymptomatic. The patient was a non-smoker and had no medical history of concern.

The proposed treatment plan was:

1. Hygienist visit with oral hygiene instruction
2. Implant placement UR1
3. Enlighten tooth whitening upper and lower arches
4. Restoration of the UR1 implant with a Zirconia abutment and an E-max crown
5. Replacement of the crown on the UL1 with an E-max crown

An Astra Tech 4.5 x 13mm implant was placed in the UR1 site under LA. The implant achieved a high initial primary stability of 40Ncm, a single stage technique was employed and a healing abutment placed at the surgical visit.

Enlighten tooth whitening:

Whilst the implant was integrating over a period of two months, the patient began a course of Enlighten tooth whitening. This involved manufacturing of upper and lower locked seal trays with the patient whitening for 1 week with a 10% Carbamide peroxide solution, followed by another week using 16% carbamide peroxide.

Once the two weeks of home whitening had been completed, the in-office process was carried out. This involves placing 9% accelerated hydrogen peroxide gel in the super-seal trays, which are then worn by the patient for 20 minutes, the gel replenished, and worn for a further 20 minutes. This patient responded very well to the tooth whitening process, and achieved a whiter than B1 shade

within two weeks. Once the implant had integrated a fixture level impression was taken and a temporary composite crown was fabricated. This has two benefits, it frees the patient from having to wear a partial denture, and secondly, it through small adjustments can be used to enhance and develop the soft tissue profile of the site.

After the temporary implant retained tooth had sufficiently developed the interdental papillae and buccal gingival contour, the impression for the final implant retained crown and replacement e-max crown were taken simultaneously.

The implant abutment was an Astra Tech Zirconia Atlantis abutment, this was torqued to 25Ncm, and the crown cemented with temp bond. The crown on the UL1 was cemented using Ivoclar Vario link. The patient was very satisfied with the final result.



Nilesh Parmar BDS (Lond) MSc (ProsthDent) MSc (Imp Dent) 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 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. Nilesh is an Astra Tech Clinical Coach and has his own practice in Southend on Sea, Essex. He also works as a Visiting Implantologist at Sparkly Smiles in Blackheath. www.drnilshparmar.com

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