Replacing a Single Tooth

What is the overall success rate for dental implants?

Despite decades of clinical and scientific research, dental implants do not have a 100% success rate. However, the success rates have improved dramatically since the introduction of dental implant surgery and the dental profession can proudly report success rates well above 90% for most implant patients. Similarly, long-term success rates are in the high 90% range and are likewise improving.

When a dental implant has not successfully integrated, it may need to be removed, as it cannot easily be “converted” to osseointegrate. Your dentist will give you best advice about this.

A replacement implant can be placed but it may require some months of healing time and possibly bone augmentation (repair by means of grafting). Likewise, if a previously placed implant has lost significant amounts of supporting bone, there are currently no treatments that can predictably restore the lost bone after it has been in function in the mouth.

How long does it take for implants to heal?

Healing times for implants vary depending on the quality of the patient’s bone and are often extended in cases where performing adjunctive procedures is necessary. In general, dental implants require two to four months for the bone to heal (without being exposed to extra forces from biting).

Research into the mechanisms of bone attachment to titanium has improved the healing process to the point that some implant manufacturers can claim greatly shortened healing times for their products (but this is generally not the norm). In recent years, research has demonstrated that in certain controlled circumstances, dentists can immediately load implants (connect prosthetic teeth) either the same day or shortly after they have been placed. While this is becoming increasingly common, most cases require a healing period of two to four months before the prosthetic restoration can be finalized.

See the brochure “Implant Procedure” for more information on how implants work.
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How are dental implants placed?

Most dental implant surgery procedures are performed in the dentist’s office and occasionally in a hospital setting. Local anesthesia is usually adequate for these out-patient procedures, but various other forms of patient sedation may also be used (such as nitrous oxide, oral and/or intravenous sedation). Adjunctive surgical procedures, such as bone augmentation, may be performed as separate procedures or at the same time as implant placement. Each surgical procedure is different depending on the clinical situation as well as the preferences of the patient and dental practitioner/surgeon.

Implant single-tooth restorations

**Fixed Bridge**
Replacing a single tooth can be achieved with a conventional bridge or an implant retained crown. The conventional fixed partial denture (fixed bridge) requires that your dentist drills down two or more adjacent teeth to create space for the crowns of the prosthetic teeth. Placing a bridge on natural teeth increases the functional forces that are placed upon them and makes the use of floss between the teeth more difficult. Conventional bridges may need to be replaced if the supporting teeth develop cavities or periodontal disease. In a certain percentage of instances while preparing the adjacent teeth for crowns (i.e. drilling down a tooth), the preparatory procedure will cause the nerve of the tooth to die and require root canal treatment to eliminate infection of the nerve.

**Implant Crown**
An implant single tooth restoration avoids the need to restore the adjacent teeth and also replaces the support that is lost with the missing tooth. This allows normal flossing as if the replacement implant were a natural tooth. An implant is placed in the position of the missing tooth. When the implant is stable and ready for restoration, an abutment can be attached to the implant that will connect the final crown to the implant. An impression is made to record the contours of the abutment or the position of the implant top and then a crown is fabricated and fixed in place using cement or screws. An implant crown is not susceptible to cavities but may develop complications if oral hygiene is not maintained. The implant restoration should be routinely evaluated in time intervals that are determined by the conditions of the remaining natural teeth and the implant.

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**Fixed bridge**

**Single implant restoration**