

Implants in Dentistry an Overview



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A dental implant is a metal device designed to replace missing teeth. The device is usually made out of titanium and is surgically placed into the jawbone where the tooth is missing. Unlike a dental bridge, an implant is permanent. A dental implant is designed to act as the tooth root and can anchor an artificial tooth or teeth such as a crown, bridge or denture.

Over the past forty years implant dentistry has evolved from enlightened clinical experimentation to scientifically proven procedures and materials. Today dental professionals have at their disposal reliable clinical methods to replace missing teeth with implant supported systems that duplicate natural teeth in form, function, stability and beauty.

How do dental implants work

There are number of ways dental implants can be planned and utilized . Essentially though they are placed into the jaw one occupied by the tooth root , involving a small invasive procedure . there then follows a natural healing process which is exactly the same as when a tooth is extracted . during this time the implant fuses with the bone , by a process called osseointegration . at this stage post can be connected to the implant now emerging through the gum . it is on these posts that porcelain crowns and bridges are constructed making either single crowns or complete restorations possible.

Replacement of single tooth

Implants can be placed into the jaw bone in a number of ways. Traditionally the implant is positioned after a tooth has been extracted and the socket is fully healed. The implant is left to heal under the gum for a period of 3-4 months . it is then uncovered , a post attached and the final porcelain crown is placed in the same way as if it were a normal tooth.

This approach although logical involves more time and therefore more appointments . in an ideal situation , a tooth can be removed and replaced with an implant straight away . However it is possible where there is an absence of infection , the mouth is generally clean and there is sufficient bone around the tooth root itself. The advantage of an immediate implant is that it is possible in one visit to remove a tooth , insert an implant and then attach a post and the crown.

The decision whether to immediately place or delay the insertion of an implant depends on a number of factors and no specific rules apply. Immediate implants have tremendous advantages but must not be used unless an ideal situation is present itself.

Replacement of many teeth

When replacing more than one tooth , the same rules apply as for single tooth . however because the implants can be joined or splinted together with the bridges , it is not necessary to replace each tooth with an individual implant . Guidelines for the upper and lower jaws are significantly different.

Uses of implants in dentistry

1. Dental implants are used to replace natural teeth that have been lost. Most dental implants used today are made from pure titanium .The implant can then be used to place crowns and/or bridges that are cemented into place replacing missing teeth with a restoration that feels so natural you may think that it grew there. Patients often do not remember which tooth is an implant and which is there natural tooth
2. Dental implants are also used to create snap in dentures that function like your own teeth This is an comfortable and affordable alternative for patients not yet ready to invest in complete implant reconstruction.
3. Because dental implants support the bone and the gums and are not attached to teeth in any way they are the ideal tooth replacement . they create strong, permanent , natural looking tooth They can also be used in conjunction with regenerative techniques such as bone grafting.

Advantages of Dental Implants

Esthetic : Dental implants look and feel like your own teeth. Since dental implants integrate into the structure of your bone, they prevent the bone loss and gum recession that often accompany bridges and dentures. No one will ever know that you have a replacement tooth.

Tooth-saving : Dental implants do not sacrifice the quality of your adjacent healthy teeth like a bridge does because neighboring teeth are not altered to support the implant. More of your own teeth are left untouched, a significant long-term benefit to your oral health.

Confidence : Dental implants will allow you once again to speak and eat with comfort and confidence. They are secure and offer freedom from the irksome wobbles and clicks of dentures. They will allow you to say goodbye to worries about misplaced dentures and messy pastes and glues.

Reliable : The success rate of dental implants is highly predictable. They are considered an excellent option for tooth replacement.

Multi usage : Dental implants can be used to replace single or multiple teeth to enhance your appearance, smile and confidence.

Can be used in serious cases - Even in bad cases of significant tooth or mouth deterioration, dental implants can be used to give massive visual improvements

Long lasting : Dental implants can last up to 15 years. Mini implants are often a viable alternative where insufficient jaw bone exists to use standard implants

High success rate: The implant technique has been around for 40 years and is a trusted technique with high levels of success

Disadvantages of Dental Implants:

Surgery needed : A surgical procedure is required although this can often be done under local aesthetic

Cost! implants can be expensive (£2000 per tooth or more) so do your research carefully!

Bone grafting may sometimes be necessary but mini implants could offer an alternative in some cases

Rejection : In rare case, implants may fail to bond with the surrounding jawbone. In this case the jaw may be allowed to heal before trying again or the cosmetic dentist may produce a “bridge” as an alternative solution.

Implantitis it is a serious problem in which an implant can cause the stimulation and infection of surrounding tissues

FIGURES RELATED TO IMPLANTS IN DENTISTRY

FIGURE SHOWING PLACEMENT OF CROWN ON AN IMPLANT

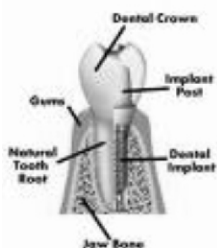


FIGURE SHOWING THE IMPLANT WITH HALF ROOT INTACT

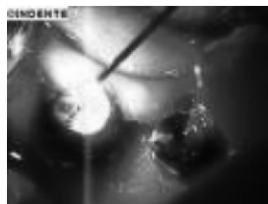


FIGURE SHOWING ACUTE IMPLANTITIS

IMPLANTS IN RADIOGRAPHS



FIGURE SHOWING ORAL CAVITY BEFORE THE IMPLANT PROCEDURE AND POST OPERATIVE ORAL CAVITY

REFERENCES

Source : Internet

Articles are also welcomed from
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Asso. Professors**

An Article Competition where every participant will get fabulous prizes

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