

MIND *THE GAP*

SEVERAL TECHNIQUES CAN BE USED TO REPLACE SINGLE MISSING TEETH, SAYS DENTAL AND IMPLANT SURGEON JEAN PAUL DEMAJO

Single missing teeth can be replaced using several techniques. Conventionally, dental bridges or, in layman terms, “fixed teeth” were used to bridge the gap. To enable a dental surgeon to attach a dental bridge, one or more teeth on either side of the gap would have to be crowned. This treatment modality would offer relatively quick treatment time with good aesthetics. However this would leave the teeth supporting the bridge to bear the load and suffer irreversible damage, eventually leading to tooth failure. Using dental implants one can eliminate this and restore the gap with a completely independent tooth-fixture engaged in the bone.

SOME CAUSES OF MISSING TEETH:

- Hypodontia: genetically missing teeth
- Trauma: assault/road-traffic accidents
- Tooth failure: failed root canal treatments and fracture of teeth supporting bridges
- Periodontal/gum disease


When replacing missing teeth, aesthetics, comfort and function are of utmost importance. Both hard and soft tissues present in the proposed site must be fully assessed. The quantity and quality of bone may be examined using radiographs and other tests. The soft tissues, including the thickness and the level of the gingiva, must be taken into consideration so as to optimise the aesthetic result. The lip-line is also important in knowing the width of the smile. This, together with other factors, will determine whether bone grafting is required. More often than not this is the case as the proposed implant site often carries a dehiscence – or wound – and it is only through bone grafting that this may be corrected. In some cases, especially trauma cases, a degree of soft tissue is lost and has to be replaced. This makes the case even more challenging and technique-sensitive.

Bone may be harvested from the patient or may even be bought. There are also several bone-substituting materials available on the market.

In most cases the implant together with the bone are allowed to heal for a period of four to six months. During this healing period the implant rests beneath the gingiva and is not disturbed. The patient often utilises a mobile or fixed temporary prosthesis



Can you spot the implant?

to fill the gap. Occasionally on insertion the implant engages very strongly in the bone allowing the placement of a temporary crown. This allows the patient to gain a temporary fixed crown which may be left in-situ throughout the entire healing period. This aids in sculpturing the gingival tissue offering a more natural final result. At the end of the healing period, permanent crowns may be constructed. Conventionally, crowns are made of porcelain fused to a precious metal such as gold. Today other non-metallic materials such as zirconia offer excellent aesthetics, bio-compatibility as well as high strength. Once the crown is constructed it is attached to the implant and secured in place. Follow-up appointments would be required to assess the integrity of the implant as well as the patient's compliance in maintaining good oral hygiene. 

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