

Weighing Reward versus Risk of Grafting Procedures: A Prosthodontic Aspect

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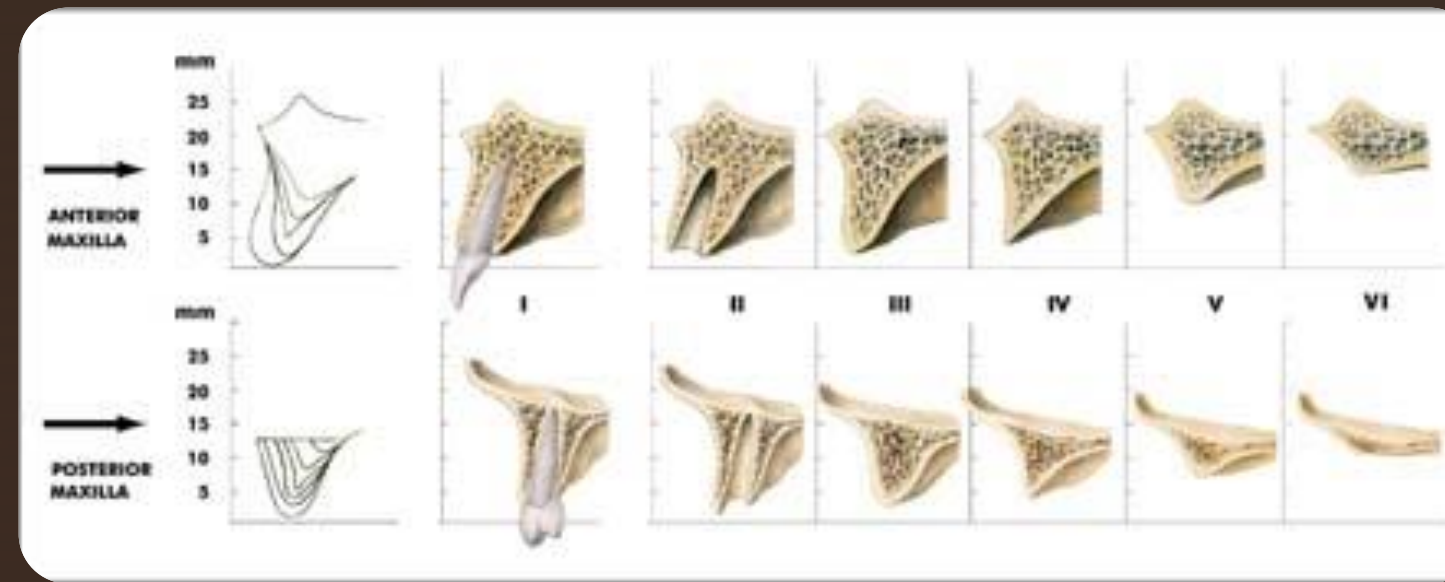
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Teeth extractions are followed by a reduction of the bucco-lingual as well as the vertical dimension of the residual alveolar ridge. Resorption of the alveolar ridges after tooth extraction cannot be prevented (Fig 1 & 2). Ridge defects develop as a result of not only teeth extractions but also surgery, trauma, infection, or congenital malformations. It results in unsightly defects and collapse of the lips, and cheeks. Therefore, alveolar ridge defects represents a challenge for dentistry. The application of grafting procedure has been introduced into dentistry mostly to enhance peri-implant bone and place the longest/widest implants possible. Today, soft and hard tissue grafting are safer and more effective than ever before. However, few practitioners are able to perform grafting procedures or regenerations in their daily practice.

Fig 1



Fig 2



Even for patients who are not considering an implant to replace a tooth that needs extraction, grafting now offers us the chance to preserve the shape and strength of the bony ridge long after the tooth is gone. This is important not only for the health and strength of the teeth surrounding the extraction site, but also for the possibility of implant, repair broken bones, bridge, denture, or partial placement in the future (Fig 3 & 4). Traditional dentures and partials always fit better when the bony ridge is thick and strong. Even bridges placed over extraction sites can be aesthetically compromised by resorption.

Fig 3

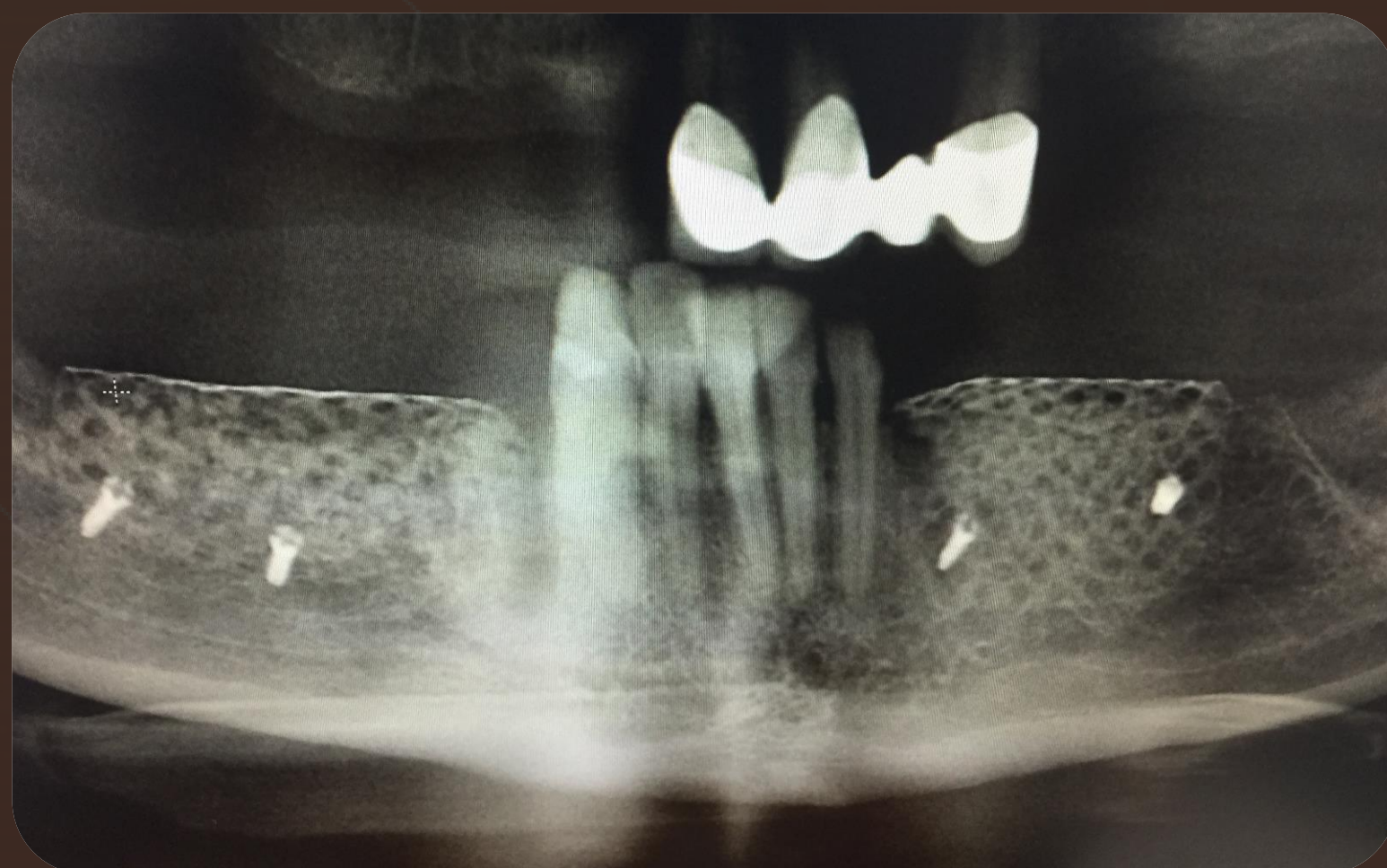


Fig 4



The presence of healthy attached tissue at the tooth and implant soft tissue interface correlates with long-term success and stability in function and esthetics. Also, the mucosal layer provide adequate resiliency to support the denture (Fig 5 & 6). Not only can a lack of keratinized tissue facilitate plaque aggregation around teeth and implants but it can also lead to recession of free soft tissue margin in the esthetic zone.

Fig 5



Fig 6



Simply put, alveolar ridge defect or bone resorption makes every tooth replacement option more difficult, more expensive, more time consuming, less comfortable, less aesthetic, less successful, and sometimes even impossible. These results support the placement of graft over extraction areas under favourable conditions.

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