Endo vs Implant: What is your hierarchy in the decision-making process?

One of the most controversially debated topics of modern dentistry has been whether to retain a tooth with endodontic treatment, or to just extract it and replace it with an implant.

In the 1980s, implant dentistry became the mainstream treatment modality, with the purported promise of a maintenance free, definitive and long-term solution for a compromised tooth. It seems that the promise of the '80s has not materialised as expected, and times have certainly changed!

Endodontic treatment is regaining favour as the primary strategy for saving a tooth for a number of reasons. Despite the fact that endodontic treatment can be difficult to perform because of the complex anatomy of root canal systems, research has shown that the survival rate of endodontically treated teeth is at least as effective as dental implants, with the added benefit of maintaining the natural dentition. It’s been well documented that implants are more predisposed to both biological and technical complications, which may require more remedial treatment overall. That said, implants offer an important next line option for patients where endodontic options have been exhausted.

The risk factors that may affect implant prognosis are plentiful. General risk factors may include, but not limited to: patients who have diabetes; immunosuppressive conditions; poor oral hygiene; history of periodontal disease; and, of course, those who smoke. Local factors may include, but not limited to: faulty implant placement technique; faulty ridge augmentation procedures; restorative failures; and deep peri-implant pocketing.

Plaque-related disease is more commonplace with implants than with the natural dentition. It is important to educate patients of this issue in order to maximise long term success rates of implants. One must also consider the reason why the patient lost their natural dentition in the first place, necessitating the need for extraction and subsequent replacement. Behavioural change, especially in high risk patients is of paramount importance.1

Dental imaging has made leaps and bounds with the advent and use of cone beam computed tomography (CBCT) enlightening us to the complexities of the root canal system, and thereby necessitating 3-D disinfection and obturation.

High magnification in the form of the dental operating microscope has enabled many practitioners to treat complex root canal anatomic variations more thoroughly and to tip the balance in favour of healing.

Although the hierarchy of treatment planning in the early days first looked at implants as the pinnacle of treatment compared to retaining the natural dentition with endodontic/restorative treatment, this has dramatically changed as increasing reports have come to light regarding the complications now associated with implants. The priority in recent years has seemed to revert back to maintaining the natural compromised teeth through remedial endodontic and restorative procedures.

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Reference:
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