## The Endodontologic—Implantologic Dilemma

The last decade has definitive changed the face of contemporary dentistry. The profession has moved from a mechanical, poorly reparative approach to an evidence based biologic oriented science. Endodontology has made its big movements forward based upon introduction of Microscopes, Ultrasonics, NiTi rotary techniques, advanced disinfection protocols and leackage minimizing root canal obturation materials; direct restorative dentistry guarantees today predictable long term results using modern adhesive approaches while implantology excelled with new surface coated implants, CT based prosthetic driven technology.

This great steps towards rasing the long term clinical outcame results places big question marks around treatment decisions and selections. Literature reviews proove similar 5 years results for RCTs and for Implants when to perform and RCT and when to indicate an extraction? What are the decision making trees for the different treatment indications. This article would like to offer some compilations of current available literature consequences and help the General Practitioner find a way out of the labyrinth. Before even starting to analyse deeper the questions one must review the differences between a natural tooth and an implant (Fig. 1). Exertising a medical profession the dental practitioner needs to understand that teeth are a different entity compared to implants. The osseointegrated implant replaces a missing tooth identifying reduced protective reflexes and

not allowing for adaptive changes or even bioreparative approaches (Fig. 2).

Different papers have been published in the recent years trying to solve the dilemma. Most important are the compilations of the American Association of Endodontists in the US. The AAE has furnished the Endodontic profession with several position papers helping General Practitioners as well as Specialists to offer the patient the best treatment they need—deserve or can afford. To offer an endodontic service to a patient implies considering several conditions out of the different dental specialities (Fig. 3). Let me try to exemplify this just reflecting on restorative dentistry as indicated by the AAE (Fig. 4).

Before being eligible to use the above introduced decision tree the dental practioner needs to posses accord-

## Biologic differences The clinician s consideration tooth vs. implant Occlusal thickness perception Periodontal membrane → shock absorber Direct contact bone-implant →higher impact force →distribution of forces are →force directed primarly to around the tooth · Tooth - tooth: crest 20 microns →tooth mobility can be →implant is always rigid related to force Tooth – implant: 48 microns →mobility dissipates lateral/nocive forces →lateral forces increases strain to bone · Implant-implant: 64 microns →fremitus is related to acting forces →no fremitus available →bone loss at crest →bone loss reversible

Fig. 1: Differences between a natural tooth and an implant. – Fig. 2: Protective reflexes. – Fig. 3: The endodontic service is based on several conditions.

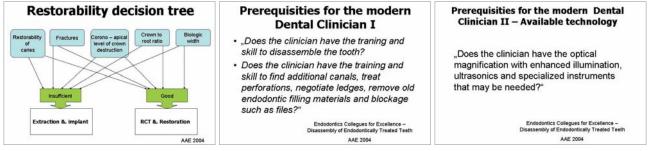


Fig. 4: Restorability decision tree. – Fig. 5: Prerequisites for the Modern Dental Clinician part 1. – Fig. 6: Prerequisites for the Modern Dental Clinician part 2.