Perio meets implant dentistry

Author: Rainer Buchmann

The preservation of the natural dentition is the prerequisite in daily patient care. In advanced periodontal disease, the successful realisation of implant therapy requires knowledge in patient expectations, clinical diagnostics, proper surgical skills and delegation of basic services to dental hygienists. Implant treatment in severe periodontitis demands a two-step, time-tested approach, evaluating the outcomes of basic periodontal therapy before implant placement.

Integrated dentistry: Success

The successful positioning of dental partnerships in the fast-growing health market implicates predictable treatment strategies to save permanent teeth. According to orthopaedic, cardiac or vascular medicine, an on-time decision-making protocol for implant therapy is recommended to counterbalance functional and aesthetic discomfort in advanced endodontic and periodontal breakdown settings. Patient’s current and future expectations drive our practices into the necessity to provide synergistic periodontal and implant treatment solutions.

The advantages are:

- Optimising implant success by proceeding with periodontal therapy
- Enhanced economic profit due to by-effects from delegated scaling and root planing
- Promotion of oral and body health of both dental patients and staff members

The need to preserve healthy teeth and gums, the ever-expanding influences of web, TV and magazines and an increase in low-cost implant treatment render implant dentistry internationally attractive. The transition of dental practices into the implant market is reasonable, especially for growing dental partnerships. The capital investment and running costs for a surgical implant setting are redeemed by more than 50 implants a year. Because of the economic commitment, a careful financial strategy is needed not to neglect challenges and developing concepts preserving and salvaging compromised teeth from conservative and periodontal dentistry.

Decision-making

Classical implant therapy protocols comprise must-indications resulting in an immediate treatment plan. According to patient preferences, clinical settings and insurance plans, these must-indications with an ad-hoc implant placement recommendation are, in order of precedence:

- Long-term missing bridgeworks or prostheses, edentulous mandible
- Advanced endodontic damage
- Trauma (tooth fracture)
- Oral cancer surgery

Periodontal diseases represent can-indications. Treatment planning is running more complex. The decision-making comprises a time-tested therapeutic approach. In advanced periodontal settings of more than 50 per cent bone loss with furcation involvement level III, patients suffer from oral discomfort. The tooth prognosis becomes less positive, the frequencies of follow-up visits increase (Fig 1). Periodontal therapy ‘before’ implant planning is aimed at saving doubtful (not hopeless) teeth with a grace period of at least three to six months to evaluate for periodontal treatment outcomes. Thorough scaling and root planing frequently results in a mid-term improvement (two years) up to a long-term stabilisation (five years) of preliminary affected teeth.

The need to preserve healthy teeth and gums, the ever-expanding influences of web, TV and magazines and an increase in low-cost implant treatment render implant dentistry internationally attractive. The transition of dental practices into the implant market is reasonable, especially for growing dental partnerships. The capital investment and running costs for a surgical implant setting are redeemed by more than 50 implants a year. Because of the economic commitment, a careful financial strategy is needed not to neglect challenges and developing concepts preserving and salvaging compromised teeth from conservative and periodontal dentistry.

The decision to maintain the periodontally compromised dentition undergoes the following criteria (Fig 2):

- Patients with no preferences to comfort, aesthetics and costs
- Patients willing to accept enhanced tooth mobility, occasional

![All-in-one Laser](image-url)

£3,300 inc.

Laser Dentistry - Laser Whitening - Laser Therapy

Made in Britain

QuickLase

Proud Sponsors of BILD

British Institute of Laser Dentistry

Inc. VAT, Delivery, all Accessories plus Online & Hands on BILD training course
Implant therapy in advanced periodontal disease

The survival rates of teeth with severe periodontal damage published in evidence-based studies are rarely valid for patients requiring treatment in dental offices (Fig 4). Shortcomings in oral hygiene, lack in supportive care, oral dysfunctions, stress, smoking and general disorders abbreviate the function times of periodontally compromised teeth sustainability.

The advice to replace affected teeth with implants in advanced periodontal settings within the maxilla implicates on-time patient information of the second and third molar removal: implant placement and prosthetic bridgeworks are scheduled in the functional masticatory area until to the first molar. In the mandible, the second molars can be preserved due to their beneficial root anatomy. They should be restored, but not included in implant planning. Following the removal of the first molar in the maxilla, the implant therapy is often preceded (if the supporting bone is less than 4mm) or accompanied by a simultaneous maxillary sinus floor elevation at furcation involvement level III (Fig 5). Rendering the case prognosis uncertain and may aggravate long-term success.

The function times of periodontally compromised teeth

Summary

In advanced periodontal diseases, the network between medical progress and ever-expanding patient’s expectations requires a time-tested schedule with a grace period of three to six months to evaluate the affected dentition for periodontal treatment outcomes. If patients anticipate immediately fixed and aesthetic restorations, on-time implant therapy with minimal augmentative solutions is recommended. Preservation of periodontally compromised natural teeth is advised when patients display no preference for further comfort and aesthetics. Periodontal therapy is continued, supplemented with surgery in advanced intra-bony settings where oral hygiene is impaired. The long-term success for the natural dentition and implants similarly depends on patient’s medical and local risk factors that cannot be forecasted with any genetic or susceptibility test for sale.

About the author

Prof Dr Rainer Buchmann
Practice limited to Periodontics
Königsallee 12, 40212 Düsseldorf, Germany
Tel.: +49 211 8629120
E-Mail: info@rainer-buchmann.de
www.rainer-buchmann.com