Periodontal Treatment Guide
The treatment of patients with periodontal disease should involve the application of standard procedures based on commonly accepted guidelines. This “Periodontal Treatment Guide” aims to support local networks of general dentists, hygienists and periodontists by providing evidence-based guidelines for diagnosis, referral and treatment options.

The “Periodontal Treatment Guide” is the result of a consensus established by a group of experienced and highly renowned periodontists who based their recommendations for these guidelines on the systematic assessment of the available literature. The final goal of these activities is to help you to improve periodontal therapies in order to restore oral health and help preserve the teeth of the patient.
The following authors have significantly contributed to the development of the “Periodontal Treatment Guide”

Prof. Dr. med. dent. Anton Sculean, Dr. h.c., M.S., Chairman of Department of Periodontology, School of Dental Medicine, University of Bern, Bern, Switzerland

Dr. Christina Tietmann, Certified periodontal specialist of the German Society of Periodontology, Private Practice for Periodontology, Aachen, Germany

Dr. David Nisand, Lecturer of periodontics at the University of Paris, Private Practice limited to periodontology and implantology, Paris, France

Dr. Frank Bröseler, Certified periodontal specialist of the German Society of Periodontology, Private Practice for Periodontology, Aachen, Germany

Dr. Holger Janssen, Specialist for periodontology, implantology and restorative dentistry, Private Practice, Berlin, Germany

Dr. Mario Roccuzzo, Lecturer in Periodontics at University of Torino and Siena. Private Practice limited to Periodontics and Implantology, Torino, Italy

Dr. Markus Schlee, Lecturer for periodontics and implantology at the Steinbeis University, Berlin and DIU, Dresden, Germany. Private practice limited to periodontology and implantology, Forchheim, Germany

Prof. Dr. Nick Donos, DDS, MS, FHEA, FDSRCSEngl, PhD., Head & Chair of Periodontology, Director of Research, UCL-Eastman Dental Institute, Department of Periodontology, London, United Kingdom
Periodontal treatment

**Legend**

- **BPE** Basic Periodontal Examination
- **PPD** Probing Pocket Depth
- **FMPS** Full Mouth Plaque Score
- **BOP** Bleeding on Probing
- **GTR** Guided Tissue Regeneration
- **SRP** Scaling and Root Planing

**Periodontally healthy patient**

**Evaluation**

**Patient with periodontal disease**

**Hygiene**

**Patient with periodontal disease**

**Surgery**
Periodontally healthy patient

**ORAL CHECK**

**MAINTENANCE PHASE**

**EVALUATION**

- PPD ≤ 4 mm
- FMPS ≤ 20%
- BOP ≤ 20%

**TO CHECK**

- Oral hygiene
- Tobacco consumption
- Periodontal status
- Furcation involvement
- X-ray status
- General health

**TO DO**

- Oral hygiene motivation
- Instruction
- Disinfection

Not successful

**PROPHYLAXIS**

Preventive long-term care

Click here
**Patient with periodontal disease**

**SYSTEMIC PHASE AND PERIODONTAL DIAGNOSIS**

**EVALUATION**

- **PPD ≤ 4 mm FMPS ≤ 20% BOP ≤ 20%**
  - Moderate chronic periodontitis
    - PPD ≤ 6 mm without intrabony defect
    - Furcation involvement (class I)
  - Severe chronic periodontitis or aggressive periodontitis
    - PPD > 6 mm with intrabony defect
      - with furcation involvement (class II or class III)
    - Necrotizing periodontitis
      - Periodontitis with systemic disease
      - Special case of periodontitis
        - PPD > 6 mm Profuse bleeding or pus

**PROPHYLAXIS**
Preventive long-term care

**TO CHECK**
- Oral hygiene
- Tobacco consumption
- Periodontal status
- Furcation involvement
- X-ray status
- General health (systemic diseases, e.g. diabetes, circulatory problems, etc.)
- Stress
- Pregnancy

Consider also the removal of inadequate restorations, optional splinting before surgery, use of microbiologic tests, involvement of general physician and extraction of hopeless teeth.

Regarding hopeless teeth the following factors should be considered: bone loss, clinical attachment loss, degree of mobility, endodontic factors, restorative factors, anatomy and tooth position.

**TO DO**
- Optionally not via specialist
  - Refer to a specialist
Patient with periodontal disease

**TO DO**
- Motivation for oral hygiene
- Instruction
- Plaque control

**RE-EVALUATION**
- PPD ≤ 4 mm
- FMPS ≤ 20%
- BOP ≤ 20%

**TO DO**
- Non-surgical periodontal treatment i.e. supragingival and subgingival SRP

**RE-EVALUATION (3 Month)**
- PPD ≤ 4 mm
- FMPS ≤ 20%
- BOP ≤ 20%

**TO DO**
- Second non-surgical periodontal treatment

**PROPHYLAXIS**
Preventive long-term care

**Click here**
PERIODONTAL SURGERY OF MULTI-ROOTED TEETH WITH FURCATION INVOLVEMENT (Class II and III)

PERIODONTAL SURGERY OF SINGLE-ROOTED TEETH OR MULTI-ROOTED TEETH WITHOUT FURCATION INVOLVEMENT (PPD > 6 mm)
Surgery – with furcation involvement (Class II and III)

MAXILLA¹

- **Class II**
  - Buccal: Straumann® Emdogain® or GTR
  - Mesial: Straumann® Emdogain®
  - Distal: Root resection or flap surgery with Straumann® Emdogain®

- **Class III**
  - Resective approach or extraction

MANDIBLE²

- **Class II**
  - Straumann® Emdogain® or GTR either alone or in combination with graft (in buccal defects) or resective approach

- **Class III**
  - Tunneling, or resective approach or extraction

¹ Limited evidence for regeneration
² Depending on the local soft and hard tissue characteristics
Surgery – without furcation involvement (PPD > 6 mm)

HORIZONTAL BONE LOSS

Conventional periodontal flap surgery
Conservative or resective approach according to site characteristics

ANGULAR BONY DEFECT

Site mapping for defect localization, e.g. bone sounding
Regenerative surgical technique designed to maintain the interdental soft tissue
Intrabony component ≥ 3mm

SELF-CONTAINED DEFECT

Straumann® Emdogain® or GTR either alone or combined with graft

NON-SELF-CONTAINED DEFECT

Straumann® Emdogain® or GTR combined with graft
Re-evaluation

RE-EVALUATION (6 Month)

- PPD ≤ 4 mm
- FMPS ≤ 20%
- BOP ≤ 20%
- Closure or improvement to furcation class I
- Filling of the angular bony defect

Successful

PROPHYLAXIS
Preventive long-term care

Not successful

TO DO

Reconsider diagnosis and treatment plan.
Further non-surgical therapy, if necessary.

TO DO

Post-operative care

Click here
Post-operative care (after periodontal surgery)

- Use of antiseptic oral rinse (e.g. 0.1-0.2% chlorhexidine solution) for 3-6 weeks
- Optional use of systemic antibiotics
- Removal of sutures when they are no longer necessary for wound stability (usually after 10-14 days)
- No brushing in the operated area for at least 2-3 weeks, professional post-operative care once a week (about 30 min)
- After 3 weeks gentle brushing of the buccal and lingual tooth surface with a “wiping technique”
- No sulcus or interproximal tooth cleaning for at least 3-4 weeks post-op/until stable or interproximal conditions are achieved
- Regular check-up by dentist – individual recall program
The following publications have been consulted by the authors

Exclusion of liability for statements and recommendations of the authors: The statements and recommendations published in this Periodontal Treatment Guide have been systematically assessed and carefully selected by the publisher of the Periodontal Treatment Guide (Institut Straumann AG, Basel). The statements and recommendations in every case reflect the opinion of the authors and therefore do not necessarily coincide with the publisher’s opinion. Nor does the publisher guarantee the completeness or accuracy and correctness of the statements and recommendations published in the Periodontal Treatment Guide. The information given in the Periodontal Treatment Guide cannot replace a dental assessment by an appropriately qualified dental specialist in an individual case. Any orientation to statements and recommendations published in the Periodontal Treatment Guide is therefore on the dentist’s responsibility. The statements and recommendations published in the Periodontal Treatment Guide are protected by copyright and may not be reused, in full or in part, without the express consent of the publisher.