2nd Consensus Statement on Probing Around Basal and Corticobasal® Implants (2021)

Executive Summary

This consensus statement addresses the different diagnostic value, risks, and clinical relevance of probing around natural teeth, crestal implants, and basal / Corticobasal® implants. While probing is a recognized diagnostic tool for periodontal evaluation and for monitoring crestal implants, it is not appropriate for Corticobasal® or lateral basal implants. Probing in these cases carries risks without clinical benefit and may constitute malpractice.

Key Consensus Statements:

- Probing is valid and reproducible in natural teeth and crestal implants when used with caution.
- Diagnostic value of probing around crestal implants is limited; reproducibility is variable, and probing depths >5–6 mm indicate higher risk of peri-implant disease.
- Probing around Corticobasal® and lateral basal implants is contraindicated due to the risk of iatrogenic damage and infection.
- Bleeding on probing is not a reliable diagnostic indicator in implant dentistry.
- Radiography and clinical monitoring, not probing, are appropriate methods for evaluating Corticobasal® implants.

1. Background

Consensus statement: Probing is widely used in periodontology and implantology to assess attachment levels and peri-implant health. Its applicability differs between natural teeth, crestal implants, and Corticobasal® implants.

2. Probing Around Natural Teeth and Crestal Implants

Consensus statement: Probing is a standard diagnostic tool around natural teeth and crestal implants, though limitations exist.

- Pocket depth measurements provide indirect information on attachment level and peri-implant condition.
- Probing reproducibility is limited, with ±1 mm variability under clinical conditions.
- Probing depths >5–6 mm around crestal implants may suggest peri-implant pathology but must be interpreted cautiously.
- Probing should be avoided during early healing (first 3 months post-abutment connection) to prevent disruption of soft tissue healing.

3. Limitations of Probing as a Diagnostic Tool

Consensus statement: Probing has limited diagnostic validity for crestal implants and should not be over-interpreted.

- Bleeding on probing is not a reliable predictor of peri-implant bone loss.
- Probing depths differ due to tissue composition and implant surface design.
- Measurement errors are greater around implants than teeth.

4. Probing Around Lateral Basal and Corticobasal® Implants

Consensus statement: Probing around lateral basal and Corticobasal® implants is contraindicated.

- Corticobasal® implants rely on cortical anchorage and do not undergo periimplantitis as seen in crestal implants.
- Probing carries significant risks, including:
  - Destruction of oro-antral seals and induction of sinusitis.
  - Iatrogenic roughening of polished implant surfaces.
  - Direct inoculation of bacteria into deep bone layers or sinus cavities.
- Probing does not yield meaningful diagnostic information for these implants.

Clinical Recommendation: Monitoring of Corticobasal® implants should rely on radiography, functional assessment, and clinical inspection, not probing.

5. Risks of Probing in Basal Implantology

Consensus statement: Probing basal implants may cause harm.

- Risk of introducing infections into cortical bone or sinus cavities
- Potential to damage polished implant surfaces, encouraging plaque accumulation and triggering periimplantitis
- Probing can trigger or worsen infections, leading to implant complications

6. Alternative Diagnostic Approaches

According to the 1st IF® Consensus statement: The condition of Corticobasal® implants should be assessed using non-invasive methods.

- Radiographic monitoring for bone stability and absence of osteolysis.
- Clinical evaluation of mobility and prosthetic function.
- Observation of soft tissue health without probing.

7. Summary of Consensus

- Probing is an established but limited diagnostic tool around natural teeth and crestal implants.
- Probing depths > 5–6 mm around crestal implants indicate possible disease, but interpretation must be cautious.
- Probing around Corticobasal® and lateral basal implants is contraindicated due to lack of diagnostic value and risk of harm.
- Alternative diagnostic measures should be used for Corticobasal® implants.

Overall consensus: Probing around basal and Corticobasal® implants is not recommended. Clinical and radiographic monitoring are the appropriate standards of care.

Approved by the expert consensus group, Version 3, 2021.