

SUSTAINING IMPLANT HEALTH:

The Significance of
Maintenance in
Achieving Long-
Term Success

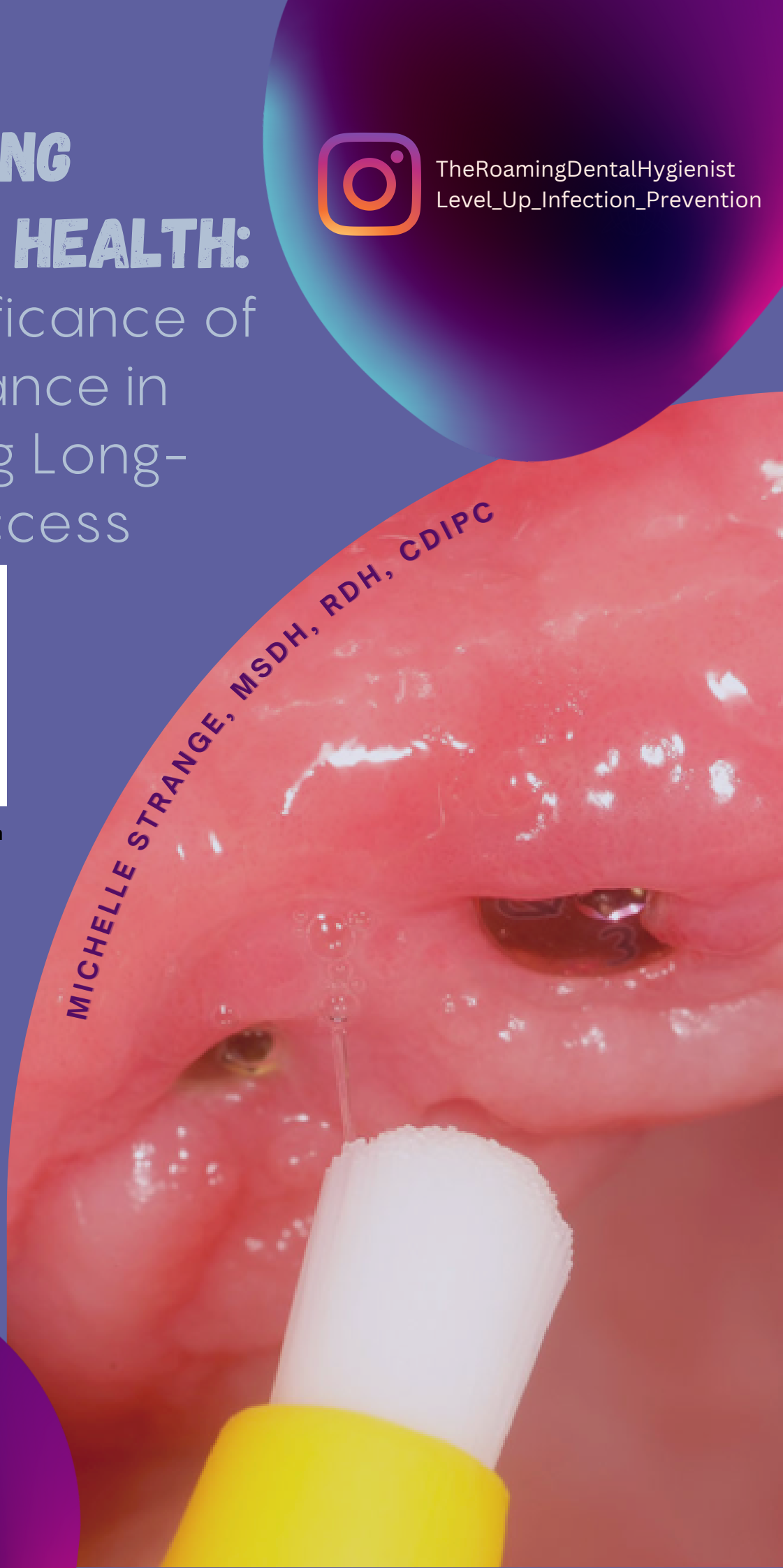


MichelleStrangeRDH.com



TheRoamingDentalHygienist
Level_Up_Infection_Prevention

MICHELLE STRANGE, MSDH, RDH, CDIPC



STAGES OF IMPLANT

HEALTH/DISEASE

THE NEW CLASSIFICATIONS AND DEFINITIONS FOR DENTAL IMPLANTS

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Peri-implant health

Peri-implant health was defined both clinically and histologically.²⁷ Clinically, peri-implant health is characterized by an absence of visual signs of inflammation and bleeding on probing. Peri-implant health can exist around implants with normal or reduced bone support. It is not possible to define a range of probing depths compatible with peri-implant health.^{26,30}

Peri-implant mucositis

Peri-implant mucositis is characterized by bleeding on probing and visual signs of inflammation.²⁸ While there is strong evidence that peri-implant mucositis is caused by plaque, there is very limited evidence for non-plaque induced peri-implant mucositis. Peri-implant mucositis can be reversed with measures aimed at eliminating the plaque.

Peri-implantitis

Peri-implantitis was defined as a plaque-associated pathologic condition occurring in the tissue around dental implants, characterized by inflammation in the peri-implant mucosa and subsequent progressive loss of supporting bone.²⁹ Peri-implant mucositis is assumed to precede peri-implantitis. Peri-implantitis is associated with poor plaque control and with patients with a history of severe periodontitis. The onset of peri-implantitis may occur early following implant placement as indicated by radiographic data. Peri-implantitis, in the absence of treatment, seems to progress in a non-linear and accelerating pattern.²⁹

Hard and soft tissue implant site deficiencies

Normal healing following tooth loss leads to diminished dimensions of the alveolar process/ridge that result in both hard and soft tissue deficiencies. Larger ridge deficiencies can occur at sites associated with severe loss of periodontal support, extraction trauma, endodontic infections, root fractures, thin buccal bone plates, poor tooth position, injury and pneumatization of the maxillary sinuses. Other factors affecting the ridge can be associated with medications and

STEPS TO ASSESS IMPLANTS

- Radiographs Consider VBWX and PA over HBWX
- Probing – light pressure is a must.
 - Not probing is grounds for supervised neglect
 - Gives qualitative and quantitative data
 - Plastic or metal probes are fine, just be consistent
 - Long-term changes in probings are more important than initial findings due to the potential deepening of soft tissue depths.
- Check mobility
- Palpation and Visual Assessment
- Check contacts and occlusion
- Check for calculus and cement- be cautious when testing with floss. If there is roughness, do not let patient proceed to use floss at home

ASSESS THE IMPLANT FOR IN-OFFICE PROCEDURE

These questions will guide you to what instruments, if any, are needed to maintain the dental implant.

- What components are you scaling?
- What type of deposit are you needing to remove? Biofilm, cement, calculus?
- What is the health of the implant being maintained or treated?



PREVENTION AND TREATMENT OF PERI-IMPLANT DISEASES: CURRENT EVIDENCE ON CLEANING OF TITANIUM DENTAL IMPLANT SURFACES

- Instruments should be chosen with the goal of effectively cleaning the implant surface with minimal damage and should not create a surface that is more conducive to bacterial colonization
- It isn't just about gouging the surface anymore, scaling can alter the surface.
- ANY damage to the surface induces a change in the chemical oxide layer and may affect the biocompatibility of the implant and impart cell adhesion (prevent healing)
- Removal of plaque from implant surfaces is a major cause of implant surface alterations
- In the presence of inflammation, surface alterations may not be the biggest concern but be cautious and attempt to do the least amount of surface alterations while attempting to achieve health
- Minor changes to the implant surface can become major changes over time
- Alterations to the titanium surface may affect biological responses
- The damage from an instrument depends on the instrument material, treatment time, and mode (pressure, speed, etc)
- Metal instruments are more effective at removing hard deposits and could damage the surface, research still recommends the use of titanium instruments for the removal of hard deposits
- All metal instruments showed signs of surface alteration to the implant with metal curettes creating the most and titanium the least
- Plastic instruments showed the least but were not effective at removing biofilm, hard deposits and over time did show a change in the surface of the implant

BOOKS

- Evidence-based dentistry for the dental hygienists by Julie Fawley (podcast episode 68)
- Health behavior change in the dental practice by Christopher Ramseier and Jean Suvan
- Motivational interviewing with Rebecca Lang www.drbeckylang.com
- Motivational interviewing in dentistry. Lynn D. Carlisle, DDS
- The power of habit. Charles Duhigg
- Peri-Implant Therapy for the Dental Hygienists. Susan Wingrove

DENTAL IMPLANT INSTRUMENTS

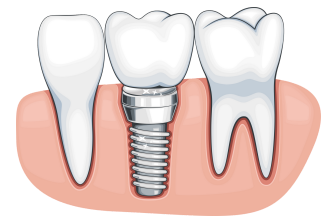
- PDT Wingrove Titanium -these were designed for implants
- Brasseler- low rockwell hardness and they now have a titanium probe
- American Eagle
- LM Dental Titanium implant instruments
- Pinyero Kit for Hybrids- PDT Instruments PDTdental.com

PIEZO AND AIRPOWDER UNITS

- Mectron / Piezosurgery unit. Has PEEK plastic tip for implant care.
 - r.braun@piezosurgery.us for more info
- Acteon piezo unit with titanium tips and Air N Go for Glycine powder
- EMS AirFlow Prophylaxis Master
 - Airpowder with erythritol AND piezo Peek plastic implant tip
 - <https://www.ems-dental.com/en/lead-submission-form-us-trainers>



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