Misch International Implant Institute

Newsletter 10 October 2019

UPCOMING COURSES (East Coast)

SURGICAL SESSIONS

Come see us at our NEW East Coast location

Margaritaville Resort
Orlando, Florida

Session 1
February 21-22, 2020
Patient Evaluation, Treatment Planning, & Implant Placement into Abundant Bone

Session 2
April 3 - 4, 2020
Treatment of the Edentulous Arch

Session 3
May 29 - 30, 2020
Implant Placement & Bone Augmentation into Compromised Sites

Session 4
July 10 -11, 2020
Treatment of the Posterior Maxilla: Osteotome & Lateral Wall Technique

Session 5
September 25-26, 2020
Immediate Placement & Loading, Soft Tissue Considerations

IMPLANT COMPLICATIONS
April 24-25, 2020
Miami, Florida

CBCT BOOT CAMP
May 28, 2020
Orlando, Florida

WHAT IS THE IDEAL MATERIAL TO FILL SCREW ACCESS HOLES IN SCREW-RETAINED RESTORATIONS?

Randolph R. Resnik, DMD, MDS

In implant dentistry today, the technique selected for filling screw access channels in screw-retained prostheses is highly dependent upon the clinician's preference. Unfortunately, there exists very little evidenced based data on the ideal materials and suggested protocol. Various materials are being utilized to fill access holes including cotton pellets, gutta-percha, polytetrafluoroethylene (PTFE) tape, cavit, and wax. According to a US dental school survey, 59 % of prosthodontic residency programs and 77% of restorative clinics use cotton pellets to cover the screw access opening and protect the head of the abutment screw under the final restoration.[1]

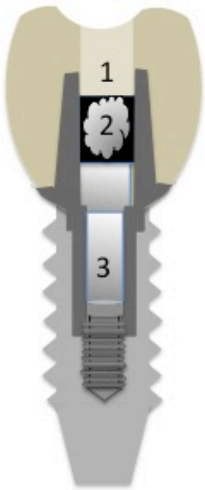
Problem: The disadvantage of many of the above mentioned materials is the increased susceptibility for bacterial and fungal adhesion. The contamination may also be initiated from bacteria trapped during prosthetic insertion. However, numerous studies have shown a significant bacterial colonization at the implant-abutment interface and within the internal implant cavity, which leads to peri-implant inflammation and marginal bone loss. [2]

Because of the micro-gaps at the implant-abutment connection, a reservoir for progressive bacterial colonization of anaerobic proteolytic microorganisms may result. In addition, the continued presence of streptococci and the fungal pathogen Candida albicans leads to the production of malodor (offensive odor). A recent study confirmed the association between the internal colonization of pathogenic bacteria and resultant peri-implant bone loss.[3]

Ideal Material: Raab et al. evaluated numerous materials for the susceptibility of bacterial and fungal growth adhesion. They concluded that the worst screw-channel filling material is cotton pellets because of the high adhesion of microorganisms. This was attributed to the untextured fiber structure of the pellets, which entraps the bacteria and allows fungal growth. The most ideal material was determined to be PTFE (plumbers tape), which was shown to have a very low adhesion rate. In addition, PTFE tape has the advantages of being condensable, sterilizable, and is easily removed.

Suggested Protocol:

1. Obtain commercial PTFE tape from the hardware store. Autoclave multiple small pieces (~0.5 in.).
2. Prior to the abutment screw placement, irrigate the screw access hole (internal aspect of he implant body) with 0.12% chlorhexadine with a 1.0 cc tuberculin syringe.
3. Verify complete seating of the abutment or crown (3) with a radiograph and torque to the manufacturer's specifications.
4. Cut and place a small piece of sterilized PTFE tape in the access chamber and condense leaving approximately 3 mm of space. (2)
5. Apply a silane primer (porcelain)/ universal cleaning agent (zirconia)
6. Apply an appropriate composite bonding agent on the walls of the screw access as well as the PTFE plug.
7. Fill the access hole with an opaque composite (1), smooth surface with a cotton applicator/bonding agent, and then polymerize.
8. Verify occlusion as per the implant protected occlusion protocol.



[1] Tarica DY, Survey of United States dental schools on cementation protocols for implant crown restorations. J Prosthet Dent. 2010;103:68–79.
[2] Raab, Philipp, et al. "Dental materials and their performance for the management of screw access channels in implant-supported restorations." Dental materials journal 36.2 (2017): 123-128.
[3] Jervoe-Storm PM,. Internal bacterial colonization of implants:association with peri-implant bone loss. Clin Oral Implants Res 2015; 26:

UPCOMING COURSES (West Coast)

SURGICAL SESSIONS

Come see us at our NEW West Coast location

Omni Mandalay Bay at Los Colinas
Dallas, Texas

Session 1
~~Sept 27-28, 2019~~ SOLD OUT
Patient Evaluation, Treatment Planning, & Implant Placement into Abundant Bone

Session 2
Nov. 1-2, 2019
Treatment of the Edentulous Arch

Session 3
Dec. 6-7, 2019
Implant Placement & Bone Augmentation into Compromised Sites

Session 4
Jan. 10-11 2020
Treatment of the Posterior Maxilla: Osteotome & Lateral Wall Technique

Session 5
March 6-7, 2020
Immediate Placement & Loading, Soft Tissue Considerations

CBCT BOOT CAMP
December 5, 2019
Dallas, TX

TEAM TRAINING
March 6-7, 2020
Dallas, TX

IMPLANT PROSTHETICS
June 11-13, 2020
Louisville KY

Misch International Implant Institute

SURGICAL SESSION 2:

Treatment
of the
Edentulous Arch

November 1-2, 2019 Dallas, TX

COURSE TOPICS:

- Edentulous Implant Treatment Planning
- Overdenture vs. Fixed Prosthesis Protocols
- All-On-Four Protocols
- Guided Surgical Techniques
- Post-Op Complications
- Mental Foramen Exposure Technique
- Avoiding Posterior Mandible Complications
- CBCT Dual Scan Technique
- Full-Arch Zirconia Prostheses
- CBCT Interactive Treatment Planning
- Pharmacologic Management (Therapeutic & Prophylactic)
- Previously Recorded Surgeries
- Nasopalatine Implants
- Implant Fees / Insurance Coding
- Practice Management - Integrating Implants Into Your Practice

HANDS - ON LAB:

- Maxillary Full Arch Placement
  - Pilot Guide Placement - Universal Guide Placement - Fully Guided Placement
- Mandibuar Full Arch/Overdenture Placement
  - FreeHand
- Advanced Suturing Technique

CLICK HERE TO REGISTER

TEAM TRAINING IS BACK!!!

March 6 -7, 2020 Dallas, TX

PROGRAM AUDIENCE:

- Front Office Staff
- Assistants
- Hygienists

COURSE TOPICS:

- Starting an Implant Practice
- Internal Marketing
- Room Set-Ups
- Surgical / Prosthetic Assisting Protocol
- Armamentarium
- Patient Treatment Plan Discussion
- Implant Fees / Insurance
- Implant Forms
- Implant Maintenance

CLICK HERE TO REGISTER

35th YEAR ANNIVERSARY LECTURE

Misch Institute Reunion

TUITION: FREE FOR ALL MISCH GRADUATES (Pre-Symposium)

Tribute to the Life of Dr. Carl Misch

Current Hot Topics and Protocols in Implant Dentistry

- Latest Socket Graft Protocols
- Osseodensification
- Immediate Placement Protocols
- Immediate Loading Technique
- Bone Growth Factors
- Full Arch Zirconia Prosthesis
- Stackable Surgical Tempate Techniques
- Peri Implant Disease (Detoxification and Grafting Techniques)

ICOI Winter Pre-Symposium

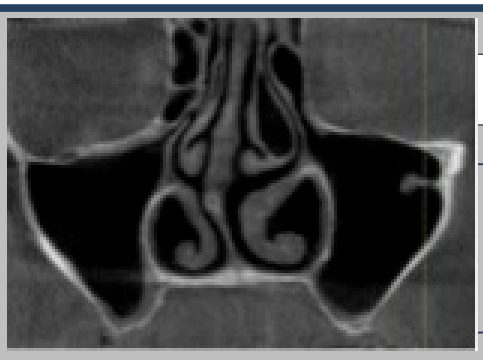
February 27, 2020

8:00 am - 12:00 pm

Houston,TX

Misch International Implant Institute

QUESTIONS OF THE MONTH



#1: CBCT ANATOMY QUESTION

This coronal image depicts **three** of the most common anatomic variants which may predispose a dental implant patient to a non-patent ostium and infection?

#2: PROSTHETIC QUESTION

The restoration of edentulous areas in the premaxilla has become one of the more common locations that are treated with dental implants. A patient with a high smile line (showing soft tissue during a normal smile) can be very difficult and challenging. What percent of the population in the United States presents with a high smile line?

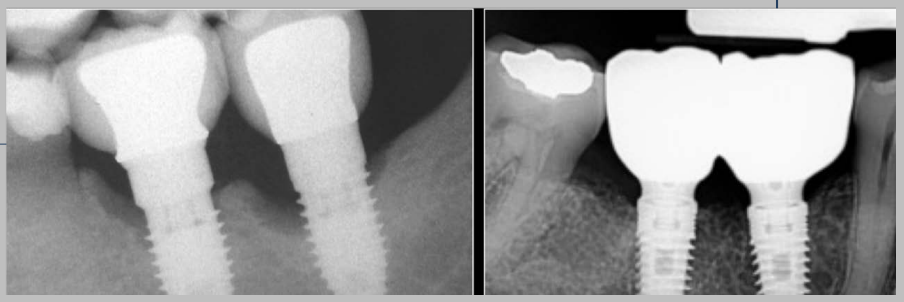
A. 5%
B. 8 %
C. 11%
D. 15%
E. 18%

#3 IMPLANT STUDY OF THE MONTH:

In a recent study in the Journal of Prosthetic Dentistry comparing **non-splinted** vs. **splinted** implants, which group exhibited;

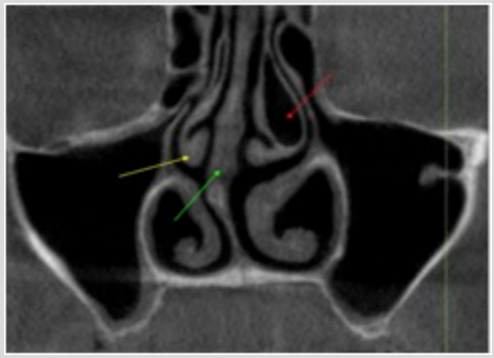
a. Greater marginal bone loss

b. Greater Implant Failure



ANSWERS

CBCT Question #1



Answer:

Concha Bullosa – RED
Deviated Septum – GREEN
Paradoxical Middle Turbinate - YELLOW

Prosthetic Question #2

Answer:

***(c.)* = 11%**

Misch, Carl E. "Rationale for dental implants." Dental implant prosthetics (2014): 1-17.

Implant Study of the Month Question #3

Answer:

***(a.)* No significant difference in bone loss between two groups**

***(b.)* Increased survival rate for splinted (99.1%) vs. non-splinted (96.5%)**

de Souza Batista, Victor E., et al. "Should the restoration of adjacent implants be splinted or nonsplinted? A systematic review and meta-analysis." The Journal of prosthetic dentistry121.1 (2019): 41-51.