On Wednesday, March 13, the Academy of Osseointegration (AO) will be partnering with leading international corporations in implant dentistry to offer myriad hands-on workshops, as well as pre-conference sessions, as an opportunity for members to earn C.E. credit toward the AO certificate in implant dentistry. All of these sessions will be offered as part of AO’s 34th annual meeting, taking place March 13–16 at the Walter E. Washington Convention Center in downtown Washington, D.C.

Hands-on workshops, fitting the multi-disciplinary nature of the annual meeting and the background of the attendees and membership, will offer registrants the opportunity to fine-tune their skills using the newest materials and technology available today. New for 2019: These popular limited-attendance and often sold-out workshops will be full-day sessions (9 a.m. to 4 p.m.).

The list of AO 2019 hands-on workshop topics includes:

How No. 1
- “Digital Solutions: Innovations in Single-Tooth Replacement,” with Mark Montana, DDS, and Joseph Schmidt, DDS. (Supported by a grant from Dentsply Sirona.)

How No. 2
- “Modern Soft-Tissue Management with Applying Autogenous Transplants and Soft-Tissue Substitutes,” with Daniel Thoma, DMD. (Supported by a grant from Geistlich Biomaterials.)

How No. 3
- “The Edentulous Patient — Advanced Surgical Techniques for both Maxillary and Mandibular Arches,” with Jay Neugarten, DDS, MD. (Supported by a grant from Nobel Biocare.)

How No. 4
- “Implant-Supported Craniofacial Rehabilitation of the Resorbed or Resected Maxilla,” with Gregory Boyes-Varley, BDS, MD, and Dale Howes, BSc. (Dent), BDS, MScDent (Pros), FCD(SA), FICD. (Supported by a grant from Southern Implants.)

Supported by a grant from Straumann:
- Workshop No. 1: “Guided Surgery Treatment Planning Workflow,” with Adam Hamilton, BDSc, DCD.

Periodontal disease bacteria linked to Alzheimer’s

By AAP Staff

A recent study has periodontists encouraging patients to maintain gum health in an effort to reduce their Alzheimer’s disease risk.

The study, published in the journal Science Advances, uncovered a potential link between P. gingivalis, the bacteria associated with periodontal disease, and Alzheimer’s. Researchers analyzed brain tissue, spinal fluid and saliva from Alzheimer’s patients — both living and deceased — and found evidence of P. gingivalis Gingipains, the toxic enzyme secreted by P. gingivalis, were found in 96 percent of the 53 brain tissue samples examined, with higher levels detected in those with the pathology and symptoms of Alzheimer’s disease.

Additionally, researchers including co-author Mark I. Ryder DMD, professor of periodontology at the University of California, San Francisco, noted that the presence of P. gingivalis increased the production of amyloid beta, a component of the amyloid plaques whose accumulation contributes to Alzheimer’s. The study confirmed via animal testing that P. gingivalis can travel from the mouth to the brain and that the related gingipains can destroy brain neurons. These findings are noteworthy in that they suggest a biological mechanism for how periodontal disease bacteria may play a role in the development and progression of Alzheimer’s.

According to Richard Kao, DDS, PhD, president of the American Academy of Periodontology (AAP), this study underscores the important role of gum health on overall wellness.

“Periodontists have long known that a healthy mouth contributes to a healthy body, and research has suggested an association between periodontal disease and dementia conditions, such as...”

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Events kick off AO 2019

Full-day hands-on workshops, pre-conference sessions to provide head start for annual meeting

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DISEASE, Page B1

Alzheimer’s,” Kao said. “These recent findings present strong evidence on how periodontal disease can impact the pathogenesis of Alzheimer’s disease and should highlight how crucial it is to manage periodontal disease, especially in older adults or individuals who have increased risk for dementia.”

Although the study results add to the evidence supporting a link between gum disease and Alzheimer’s, additional research is needed to better understand the etiology of Alzheimer’s and how periodontal disease bacteria can exacerbate progression. An upcoming FDA Phase II clinical trial will assess the benefits of using a novel small molecule inhibitor of P. gingivalis gingipains in hindering the development and progression of Alzheimer’s. This clinical trial may add further insight to the link between gum disease and Alzheimer’s.

Kao encourages older adults and other at-risk individuals to maintain diligent oral care and promptly treat periodontal disease to help mitigate Alzheimer’s risk. “More than half of the U.S. population age 30 and older has some form of periodontal disease. Prevalence increases to 68 percent for those age 65 and older. Routine brushing, flossing once a day and visiting a periodontist can help identify any disease and treat as needed, potentially diminishing the risk of developing Alzheimer’s.”

The American Academy of Periodontology (AAP) represents more than 8,000 periodontists. Periodontics is one of the nine dental specialties recognized by the American Dental Association.
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Dr. Jean-Francois Brochu,
Prosthodontist, St-Hubert, Quebec

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Live patient dental implant training courses improve care, practice scope

The California Implant Institute, located in San Diego, Calif., is offering several continuing education courses for dentists to learn advanced implant-placement techniques on live patients with the guidance and expertise of highly experienced clinicians and educators. Participants convene in beautiful Baja California, Mexico, to receive this unique hands-on training to increase knowledge, confidence and skills, allowing them to expand the scope of their practice and provide the best patient care possible. Here is a list of available courses:

- **Basic to Advanced Implant Placement Surgical Externship:** Attendees implement step-by-step implant surgical protocols on live patients, increasing their knowledge and skill in the areas of flap design, implant placement, bone grafting and suturing techniques. Participants will perform and/or assist with at least 20 implant placement surgeries. Provides 48 C.E. credits.

- **All-on-4 and Full-Arch Immediate Loading Surgical Externship:** Attendees receive extensive training in the treatment planning, surgical, prosthetic and laboratory phases of full-arch immediate loading. Doctors participate in a few immediate full-arch restorations. Each participant is assigned two full arches and assists with many more cases. Provides 48 C.E. credits.

- **Trefoil Surgical Externship:** Attendees examine the indications and limitations of treatment with the Trefoil System, learn step-by-step the surgical and restorative procedures including lab work, review clinical cases treated with the Trefoil System, review scientific support material and clinical evidence, and discuss prosthetic maintenance and complications management. Participants place and/or assist with at least two Trefoil surgeries. Provides 32 C.E. credits.

- **Advanced Bone Grafting Surgical Externship:** Attendees increase their knowledge and skill level in the areas of advanced implant surgical techniques, including lateral window sinus lift, maxillary and mandibular ridge expansion, and connective tissue and block grafting. Participants also work with Piezotome units that are available at each working station. Provides 48 C.E. credits.

All programs are organized by Academic Director Dr. Louie Al-Faraje. A highly experienced clinician, educator and innovator, Al-Faraje is continually advancing the protocols for oral implantology surgical treatment. His California Implant Institute (CII) utilizes today’s most innovative and effective clinical solutions to create and maintain optimal oral health using dental implants and bone-grafting procedures. He is the author of four implant textbooks. Information about additional faculty members is available on the CII website.

For more details, visit the California Implant Institute website at www.implanteducation.net.
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A revolutionary paradigm shift in dynamic surgical navigation

By George Mandelaris, DDS, MS

A revolution in surgical guidance is afoot. A new dynamic navigation technology called “Trace and Place” (TaP for short) was developed by ClaroNav and is now available with its Navident system. I have had the opportunity to try the technology in a range of cases, and I am very impressed. Here’s a brief description of my experience.

Registration is accomplished using any recent CT scan of the jaw by selecting onscreen and then tracking three of the patient’s teeth or other structures (such as braces or abutments). The process is done in the chair, immediately before surgery. No stent/clip or guide needs to be prepared, and the entire registration process is typically accomplished in about three minutes.

Once the jaw is registered with its CT scan, on-screen guidance of the drill position and orientation is provided. The jaw surface is fully exposed, just like with free-hand drilling.

Because the jaw often moves during the operation, the system continuously tracks the position of the jaw and adjusts the registration to keep the jaw and its on-screen image in accurate alignment.

Tracking the upper jaw is accompanied using a special head-tracking frame, which is not affected by movements of the lower jaw or changes in facial expressions.

Tracking the lower jaw is accomplished by connecting a lightweight plastic “jaw tracker” part, marked with optional targets, to a single tooth using a light-cured composite. The motions of the drill are tracked using another plastic part marked with optical targets.

After only a short experience with Trace and Place technology in my practice, I have come to believe that it is a real tipping point for dynamic navigation guidance. It has streamlined and simplified the workflow in both diagnostic and surgical phases to allow state-of-the-art technology to be an everyday component of my surgical implant practice. I can’t imagine going back.

(Save the date) for the following AAID educational events to learn what implant dentistry offers your practice.

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October 23 – 26, 2019

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Join us in Chicago, Illinois
2019 Central and Western District Meeting
Chicago Marriott Downtown Magnificent Mile
June 7-9, 2019

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Dr. Louie Al-Farage
Clinical Director,
California Implant Institute

A highly experienced clinician, educator, and innovator, Dr. Al-Faraj is continually advancing the protocols for oral implantology surgical treatments. His California Implant Institute in San Diego, CA, utilizes today's most innovative and effective clinical solutions to create and maintain optimal oral health using dental implants and bone grafting procedures. He is the author of 4 Quintessence implant textbooks.

Information about additional faculty members is available on our website.

California Implant Institute
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