DENTAL TRIBUNE

The World's Dental Newspaper · Canada Edition



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TOO MUCH DENTISTRY? TIME TO HEAD FOR THE TREES.

While at ASM15 in Toronto, consider a break from downtown and dentistry to visit Toronto Islands for a self-guided tree tour.

► page A2



CREATIVE, EFFICIENT REBUILD OF WORN, ILL-**FITTING PROTHESES**

Esthetical and functional treatment is provided with implant-supported bar on an incongruous prosthesis carrier.

► pages A8–A9



IMPLANT TRIBUNE

ACHIEVING STABILITY

Occlusal stability in implant prosthodontics: Clinical factors to consider before implant placement.

► page B1



Connect, learn, excel

Ontario Dental Association expecting 11,700 attendees and 300 exhibitors at ASM15

The Ontario Dental Association's 148th Annual Spring Meeting (ASM) is from May 7-9, attracting dentists and their dental teams to Toronto with an agenda of renowned speakers sessions covering the latest clinical, practice management and personal development topics.

The meeting also features an exhibit floor covering more than 75,000 square feet, packed with the latest dental innovations. There will be more than 300 exhibiting companies who are there to demonstrate and teach attendees about new products, services and technology from across the globe. Attendees have the opportunity to touch, test drive and compare the newest materials and technology in the dental in-

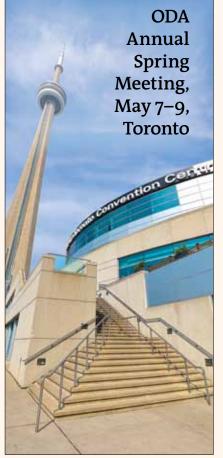
Meeting organizers expect approximately 11,700 attendees at the ASM's host location, the Metro Toronto Convention Centre, South Building, in Toronto.

> For the past 14 decades the Ontario Dental Association has focused on three core concepts to guide the purpose of the ASM: "Connect. Learn. Excel." Toward that end, meeting organizers have created an agenda of wide-ranging and topical lectures presented by nationally and internationally renowned speakers in a variety of formats. Lectures, hands-on workshops and other interactive sessions are designed to deliver high-value knowledge — and C.E. credit.

> But it's not just all work. Nowhere is that philosophy more apparent than in the selection of the opening keynote speaker: one of Canada's top comedians, Ron James. Also speaking will be Craig Kielburger, the social entrepreneur, New York Times best-selling author and globally syndicated columnist, who promises to share some insights on ways to improve our world. Even the exhibit hall floor is designed to offer some breaks from dental overload, with its Health Check Zone (to make sure you're taking care of yourself) and the Relaxation Zone (to help you take care of yourself). The exhibit hall also has two cocktail receptions

> The meeting presents a great opportunity to explore one of Canada's most popular cities during one of the most appealing times of the year: Toronto in spring. The trees are leafing out, the cafes are inviting, a variety of shows are in town and the galleries and shopping provide endless opportunity for exploration.

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The latest advancements in products and services in dentistry are on display in the Metro Toronto Convention Centre South Building, home of the Ontario Dental Association Annual Spring Meeting. Photo/ Provided by Metro Toronto Convention Centre

EVENTS

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- Journées Dentaires Internationales du Québec, in Montréal, May 22-26, presents courses in French/English
- Pediatric dental meeting will be in Seattle, May 21-24
- · Academy of General Dentistry meeting to feature new C.E. tracks
- American Dental Association meeting, in Washington, D.C., Nov. 5-8, has global focus

INDUSTRY CLINICAL A8-A9

· Esthetical and functional treatment with implant-supported bar on an incongruous prosthesis carrier

INDUSTRY

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• Endodontic Photon Induced Photoacoustic Streaming

IMPLANT TRIBUNE B1-B5

- Occlusal stability in implant prosthodontics: Clinical factors to consider before implant placement
- Five days of implant training with the American Academy of Implant Prosthodontics
- · See the 'Visible Difference' with Designs for Vision
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¬ CONNECT, page A1

Among your choices: international cuisine, unique shopping venues, diverse cultural facilities and events, trails, parks, distinctive architecture and non-stop top-caliber entertainment.

Take a break in the trees

For a break from the downtown bustle, Toronto Islands offers a respite, a 10-minute ferry ride away. Catch the ferry at the Toronto Ferry Docks west of the Westin Harbour Castle Hotel, between Yonge and Bay streets. Ferries travel to the three main islands, which are connected by bridges. There are plenty of ways to spend money on the main island, including a children's amusement park, children's garden, cafes, food vendors, canoe rentals and weekend bike rentals.

The islands are home to about 800 people (comprising Canada's highest per

capita population of artists). They are considered to be North America's largest urban community that is car-free. Worth consideration is the self-guided Toronto Island Tree Tour, part of the Canadian Tree Tours program. You can download a sheet listing the tour's 54 trees, or pick up a tour sheet at a tourism-brochure display.

The trees have identification plaques and the tour sheets include GPS coordinates for each tree. So you can pick out a few that you'd like to hone in on, consult your smart phone and make a beeline from tree to tree on your own self-guided mini-tour. Among the possible candidates: Kentucky coffee-tree, Swedish whitebeam, Japanese zelkova, London plane-tree, European larch and a Schubert cherry.

Sources: Ontario Dental Association and www.torontoharbour.com.



The Toronto skyline is framed by trees on Toronto Islands. The urban sanctuary is a 10-minute ferry ride across Toronto Harbour. Among the many attractions is a self-guided tree tour. Photo/Benson Kua, Toronto



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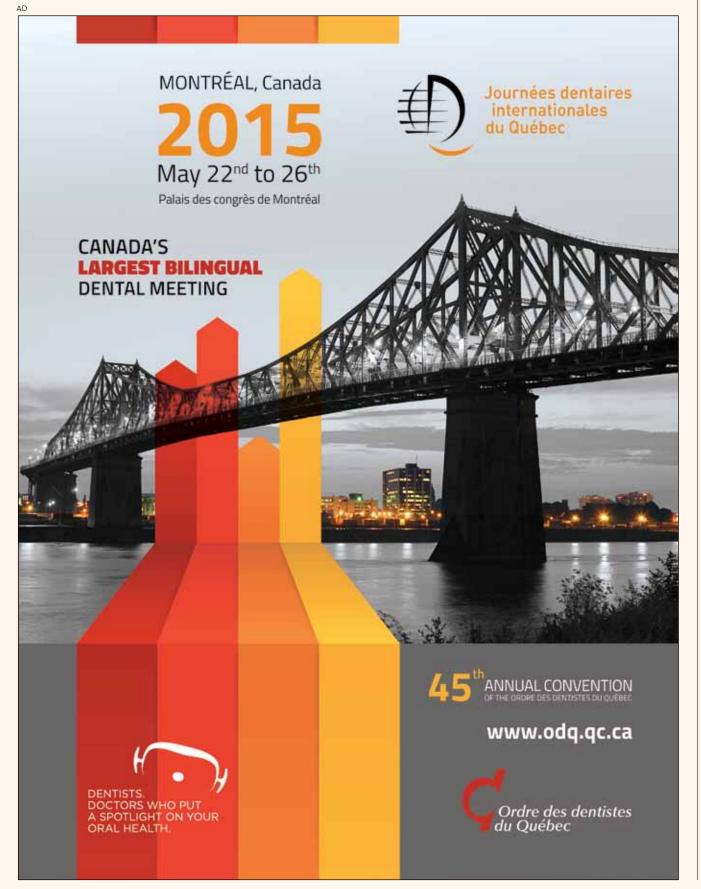
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JDIQ courses in French/English

The Journées Dentaires Internationales du Québec, Canada's largest bilingual dental meeting, according to organizers, is from May 22–26 (Friday through Tuesday) in Montréal. Online registration is available at www.odq.qc.ca.

Meeting apps for Apple and Android phones and tablets can be downloaded through www.odq.qc.ca, the App Store or the Play Store. On-site at the meeting, free WiFi will be available to all delegates and exhibitors at the venue, the Palais des congrès de Montréal.

The meeting's educational program has more than 125 prominent speakers from Canada, the United States and Europe presenting approximately 175 educational sessions in English and French

during the five-day convention.

Among the educational sessions: "Lights, Camera, Action! Patient Photography Made Easy - A Hands-On Workshop," "Endodontics for General Dentists: Advanced, Comprehensive and Practical Hands-On Training," "Oral Surgery for the General Dentist: Faster, Easier, and More Predictable" and "Hands-on Infection Control Workshop."

Many other lectures and workshops are scheduled, with details in the program online.

225 companies, 500 booths

The exhibition hall will feature more than 225 companies in 500 booths in the 133,563-square-foot space.

More than 2,000 company representatives will be on hand to help you see, compare and make decisions on new furniture, equipment, instruments, techniques and other products and services all under one roof.

One C.E. hour per day can be earned by visiting the exhibit hall. Just be sure to have your badge scanned at the entrance.

The exhibition hall hours are 8 a.m. to 6 p.m. on Monday, May 25, and 8 a.m. to 5 p.m. on Tuesday, May 26.

The organizers invite you to join the more than 12,000 expected delegates to meet, learn, share and enjoy this gathering of friends and colleagues.

(Source: JDIQ)



JDIQ is May 22-26 at the Montréal Convention Centre (Palais des congrès de Montréal. Photo/MTTQ/Marc Cramer, Tourism Montréal

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AAPD to be in Seattle, May 21-24

Pike Place Market, the Space Needle, the EMP Museum and some of the top thought leaders in pediatric dentistry are among the reasons to be in Seattle May 21-24 for the American Academy of Pediatric Dentistry (AAPD) annual ses-

Scientific sessions are at the Washington State Convention Center, in the heart of downtown, adjacent to hotels, restaurants, nightlife and shopping. Taking advantage of the location, the welcome reception on Thursday, May 21, features exclusive access to the Space Needle, EMP Museum and Chihuly Gardens.

The keynote, on May 22, features Frank Abagnale with "The True Story of Catch Me If You Can." An authority on forgery, embezzlement and secure documents, Abagnale became an expert of sorts 40 years ago as a world-famous con man, as depicted in his best-selling book, "Catch Me If You Can." Leonardo DiCaprio and Tom Hanks starred in a Steven Spielberg film based on the book.

Three-day exhibit hall

Products and services in the meeting's exhibit hall will be geared toward pediatric dental practices. An AAPD booth will have a bookstore, which will have copies of the Coding Manual, the new pediatric dentistry handbook. Also in the exhibit hall will be the Healthy Smiles, Healthy Children Donor Lounge, where you can learn more about Access to Care Grants and donate to its supporting foundation.

A hospitality area on the exhibit hall floor will offer a continental breakfast, and there will be complimentary beverages each morning and afternoon and lunch available for purchase.

You can register for the meeting online by visiting www.aapd.org/annual.

(Source: AAPD)

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#1821 AT JDIQ, MONTRÉAL, QC; MAY 25-26

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AGD gathering features new continuing education tracks

At AGD 2015, from June 18–21 in San Francisco, the Academy of General Dentistry (AGD) intends to not just embrace "constant change," but celebrate it. The meeting, at the Moscone West Convention Center in San Fransisco, will showcase new technologies and C.E. courses for dentists and staff.

Keynote speaker Terry Jones, founder of *Travelocity.com* and *Kayak.com* and execu-

tive chairman of Wayblazer, will share insight on creating a culture of innovation and embracing opportunities in today's age of information. Innovation will be on display at "Modern Practice for Today's Patients," presented by Henry Schein Inc. New C.E. tracks will enable dental team members to focus on specific subject areas, such as endodontics, implants and special-

patient care. Also new will be a 90-minute live-patient dental implant course hosted by Engel Institute founder Todd B. Engel, DDS, and fundamental and intermediate Invisalign® courses for dentists and their teams.

Friends and family can attend the "President's Celebration to Honor Fellows and Masters" for dining and live music and

the AGD Foundation's "5K Fun Run/Walk" for oral cancer awareness and research.

Register at www.agd2015.org. The official hotel is the San Francisco Marriott Marquis. Early reservations are encouraged, at resweb.passkey.com/go/AGD2015, (877) 622-3056 or (415) 896-1600 (international).

(Source: AGD)

Ski, golf and C.E. — all at the '16 Pacific Dental Conference

Vancouver's Pacific Dental Conference is scheduled a bit later next year, running from March 17–19, 2016, at the Vancouver Trade and Convention Centre. The late date means you will be able to experience the festive spirit of St. Patrick's Day in the true flavour of the West Coast, while earning C.E. credits. The conference has assembled a lineup of local, North American and international speakers. With more than 130 pre-

senters, 150 open sessions and 36 hands-on courses covering a variety of topics, there should be something for every member of the dental team.

The conference's two-day dental trade

show provides the year's first opportunity to see the newest equipment in Canada. A spacious exhibit hall invites attendees to see innovative new techniques in use on the Live Dentistry Stage and products from more than 300 exhibiting companies. Sessions are designed to engage attendees in discussions on creating real-practice solutions. Lunches and highly popular exhibit hall receptions are included as part of the trade show.

At the conclusion of the conference, you can take a day to relax and revitalize by exploring some of the many tourist attractions in Vancouver. The ocean is just steps from the Vancouver Convention Centre, pristine snow capped mountains offer enticing spring-like skiing conditions, and numerous lush golf courses are available.

(Source: Pacific Dental Conference)

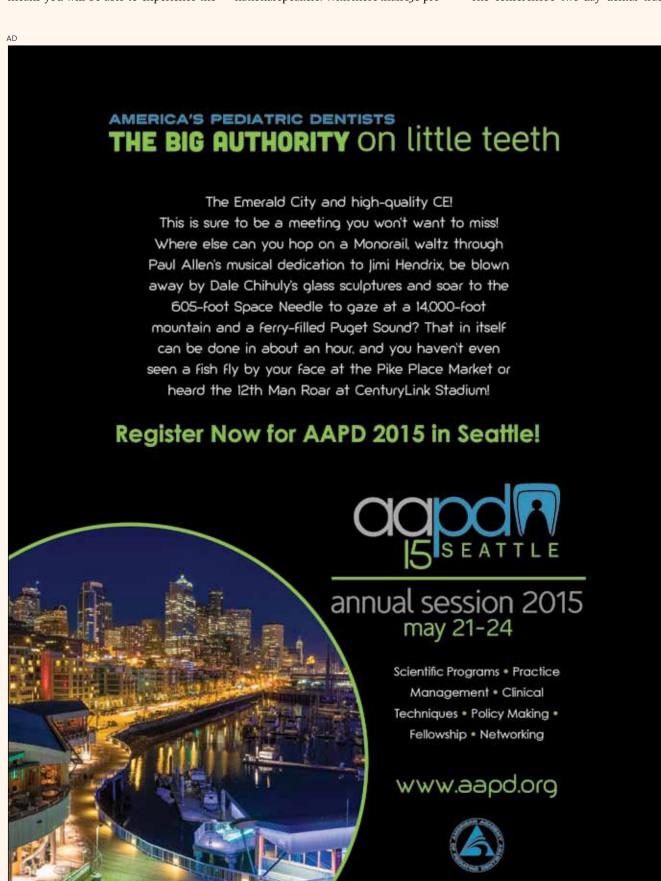
Annual ADA meeting has global focus

The annual meeting of the American Dental Association, ADA 2015: America's Dental Meeting, will be in Washington, D.C., from Nov. 5–8. As one of the largest dental meetings in the United States, the meeting offers more than 300 C.E. courses, 550 exhibits and — new this year — a welcome reception for all attendees.

The meeting includes courses and events tailored to international attendees, including a designated registration area, a special networking cocktail reception and an "International Learning Lounge" with courses in multiple languages, including Spanish and Chinese. Dentists can join the ADA as an international member to receive discounts on registration. The exhibit hall includes the ADA Member Center, which showcases essential resources to help members grow their practice.

As the government center of the United States, Washington, D.C., is a city rich in history and culture. There are numerous museums, memorials and historical monuments to visit. Additionally, the city boasts more than 100 free attractions. The ADA looks forward to welcoming dental professionals from around the world to Washington, D.C., for ADA 2015. Registration will open in the coming months. You can learn more at www.ada.org/meeting.

(Source: American Dental Association)





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Esthetical and functional treatment with implantsupported bar on an incongruous prosthesis carrier

Quick lab work creates complete denture-retention system on implants

By Carlo Borromeo, Dental Technician, Italy

Introduction

The patient, a 74-year-old female with an older, total prosthesis, asked us to improve its esthetics and function. In the initial exam, we noticed a marked difference between the total upper prosthesis (all but ruined) and the lower total prosthesis (recently manufactured across four implants). We also saw immedi-

ately that the prosthesis was incorrectly mounted, occupying too much space and leaving the teeth too exposed (Fig. 1).

After discussions with the patient, we agreed to remount both the upper and lower teeth to obtain optimal esthetic results and restore mastication function. Based on the specific demands of the case, we identified the best retentive-connection system to connect with the implants and provide the necessary over-structure, support and thickness.

Case planning

Impressions were taking to obtain vertical and centric dimensions. Once the design met the patient's need for improved esthetics and function, the dental technicians created vestibular and lingual silicon masks to guide the building of the structure and over-structure. Space availability was evaluated with teeth and implants position. These analyses

► See PROSTHESIS, page A9



Fig. 1: Patient during first clinical session.
Photos/Carlo Borromeo

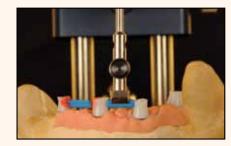


Fig. 2: Positioning of the 'OT Bar.'



Fig. 3: Checking of the dimensions using the vestibular plaque

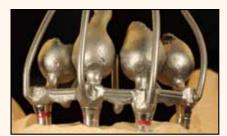


Fig. 4: Check of the precision of the bar on the model before finishing.



Fig. 5: Check of the spaces for pipe cleaner.



Fig. 6: Superstructure completed on model.

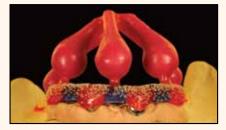


Fig. 7: Spruing of superstructure on model.



Fig. 8: Re-application of teeth using plaques.



Fig. 9: Positioning of model in the mitten for creation of a resin-made prosthesis.



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Endodontic Photon Induced Photoacoustic Streaming

Treatment uses Lightwalker AT laser with contact H14-C handpiece and PIPS fiber tip

By Prof. Giovanni Olivi, MD, DDS University of Genoa, Italy

A patient asked for the option to save her teeth that were scheduled for ex-

traction by another dentist. The lower left first and second molars had high mobility (grade 2), were necrotic, with significant probing depths in the buccal aspect.

The teeth were diagnosed for endo/perio treatment. Difficulties with this case included complex radicular anatomy, long anatomical measurements (26 and 27 mm, respectively for #36 and 37) and the presence of a deep vertical bone loss in the buccal aspect. After scaling and root planning, the teeth were scheduled for root–canal therapy.

Before treatment: PIPs

Before each treatment the PIPS $^{\text{\tiny{TM}}}$ tech-



Fig. 1: Pre-op, before the PIPS.
Photos/Provided by Dr. Giovanni Olivi



Fig. 2: Post-op, after PIPS.



Fig. 3: One month post-op.



Fig. 4: Four months post-op.

nique was applied into the periodontal pockets of each tooth for refining the debridement, removal of biofilm from the root surfaces and pocket disinfection.

The root canal treatments were performed using PIPS–specific irrigation protocols with 5 percent NaOCl and 17 percent EDTA.

Obturation with resin sealer

The canals were obturated with a flowable resin sealer (Endoreze Ultradent, South Jordan, Utah) and gutta–percha points. A final treatment of the pockets using PIPS for disinfection was performed after completing each root canal therapy to remove any extruded sealer or residual biofilm.

No post–op symptoms were reported and the mobility of the teeth progressively disappeared up to grade o.

The follow-up X-rays performed after one and four months showed healing in progress for both the teeth. Lightwalker AT laser device with contact H14–C handpiece and PIPS fiber tip was used for the treatment.

The Lightwalker parameters are: laser source: Er:YAG; wavelength: 2940 nm; pulse duration: SSP; energy: 15 mJ; frequency: 15 Hz.

Disclosure: Dr. Olivi has relationships with several laser companies (including AMD-DENTSPLY, Biolase and Fotona) but receives no financial compensation for his research or for writing articles.



DR. GIOVANNI OLIVI is an adjunct professor of endodontics at the University of Genoa School of Dentistry and a board member and professor in its master course in laser dentistry. He completed the postgraduate laser course at the University

of Firenze and earned laser certification from the International Society for Lasers in Dentistry.

Olivi has advanced proficiency mastership from the Academy of Laser Dentistry and is the 2007 recipient of ALD's Leon Goldman Award for Clinical Excellence. His private practice in endodontics, restorative and pediatric dentistry is in Rome.

 $You\ can\ contact\ Olivi\ at\ {\it olivilaser} @gmail.com.$

→ PROSTHESIS, page A8

enabled identification of the proper prosthetic treatment to choose.

A working model was placed under the parallelometer to identify the proper insertion plan. Different aspects were evaluated: the horizontal line of the incisors, the occlusion line of the posteriors, the under spaces by the areas under the frontal ridge and the implants' angulation. Once the insertion plan was finalized, castable pivots were regulated with proper height and screwed, guided by the silicon mask. Next came creation of the castable bar by setting it — area-afterarea — using resin to fix it at the external areas (Fig. 2).

Once all the parts of the structure were connected, we regulated the areas over the implants using a two-degree bur. The technician then checked everything using the silicon masks (Fig. 3). After we confirmed that the bur met all our expectations, we started the sprue procedure. We proceeded with the fusion through a special press-fusion procedure. Once it was verified that the bar respected all the desired characteristics, we continued with the spruing, directly on the model to avoid distortions during the cooling of the wax. We then proceeded with the melting, using the "diecasting" technique. We conducted a first test immediately after cleaning the coat-

The finished artifact was delivered to the clinic, where the necessary tests and radiographs were obtained. Once verified that all the parameters were correct and that the structure was passive, the bar was milled and polished at the lab. On the model, spaces were verified for the application of pipe cleaners. This same test would be conducted later in the patient's mouth (Fig. 5).

Using the silicon plaques, we built the superstructure directly on the bar, starting by positioning the containers of the

caps. Castable boxes were applied onto those, always using the silicon plaques. After avoiding the undercuts with wax, we isolated the bar and the model and then built the superstructure using resin (Fig. 6). We removed it from the superstructure and pasted the retentions. Everything was set up to proceed with the spruing directly on the model (Fig. 7). After the coating was melted off, precision and friction was verified using a revealing-paint on the bar. The teeth were applied with the aid of silicon masks (Figs. 8, 9). The containers of the clips continued to be replaced with pink caps. Everything was delivered to the clinic for the final test. With the prosthesis back at the laboratory, wax fittings were converted to resin fittings and the superstructure was finished and polished (Fig. 10). After applying it again on the superstructure, undercuts were closed with some wax, and the resin was applied to the prosthesis (Fig. 11). All the components of the prosthesis were polished and delivered to the clinic for the final test (Figs. 12, 13).

Conclusions

With adequate components, retention systems on implants and readily available technical and clinical knowledge and resources on complete dentures, you can obtain excellent results in short work times, using both traditional systems and CAD/CAM.



CARLO BORROMEO founded
Dental Laboratory Borromeo in
Italy in 1988, specializing in the
construction of prosthesis for
implants using CAD/CAM. He
collaborates with Nobel Biocare
Procera, Dental Wings, Rhein'83

and other companies to improve his expertise with their materials. He is a highly published industry author and presents and participates in many dental lab courses and conferences.

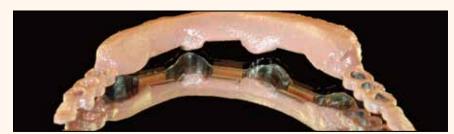


Fig. 10: Polishing of the structure.

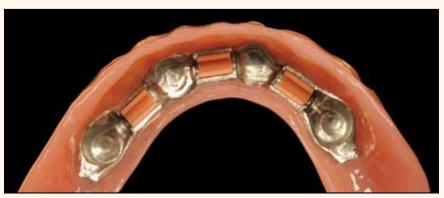


Fig. 11: Insertion of the pink caps in the structure.



Fig. 12: Finished prosthesis and bar



Fig. 13: Final results after screwing bar into the mouth and applying prostheses.