



日本顕微鏡歯科学会
Japan Association of Microscopic Dentistry

Program and Abstracts,

The 14th Annual Meeting

Japan Association of Microscopic Dentistry

“A Leading Bird of the Flock”

プログラムおよび講演抄録集

日本顕微鏡歯科学会 第14回学術大会

“顕微鏡が歯科をリードする”

15th-16th April, 2017

一橋講堂 Hitotsubashi Kodo, Tokyo

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Greetings

This year, the 14th annual meeting of JAMD will be held for 3 days from April 14th to 16th at Tokyo Hitotsubashi hall. The main theme of this annual meeting is “A leading bird of the flock” containing the message of Microscopic dentistry would lead a whole dentistry in the better way. During this annual meeting, we encourage you to verify and concern multiple innovative changes rise from magnification dentistry in conventional dental techniques. The annual meeting will also host work-shops as a new challenge from JAMD organization. And these work-shops are aiming for those new entries and beginners of micro-dentistry to learn know-hows of working under a magnified view. JAMD is looking forward to have those new entries and beginners to use this opportunity. At the same time, to attract more dentists from abroad, there will be an English translation available for those lectures held at its main hall. We believe that this would enable us to exchange and communicate microscopic dentistry with those from abroad, especially from those Asian regions. Now a days, “Microscopic Dentistry is gaining its share in the market of Japan and we wish to expand this to those Asian regions and will eventually develop JAMD organization. At last but not least, we promise you that this annual meeting will be fruitful and beneficial to all of attendances.

Congress President

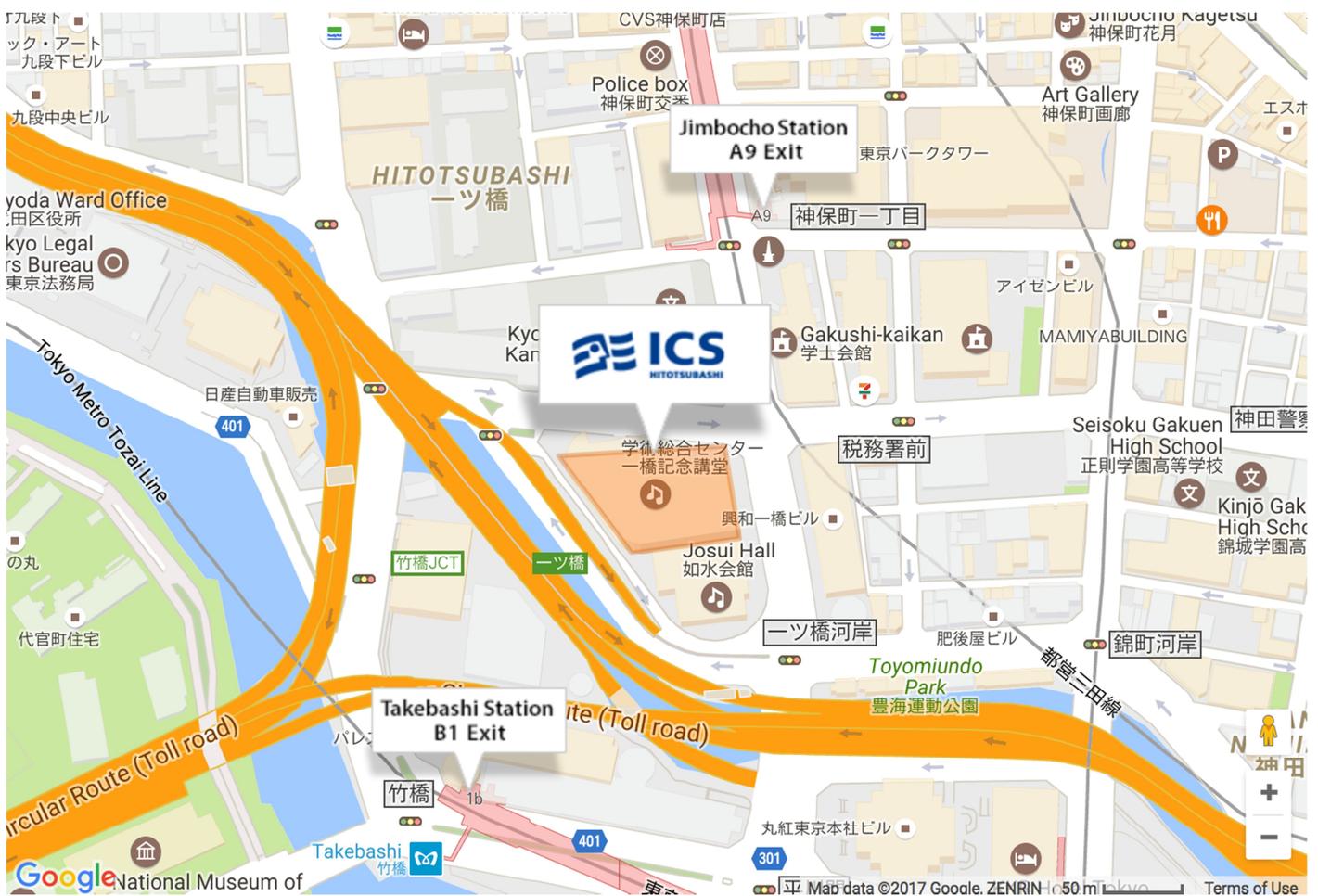
Masana Suzuki, DDS.

Map & Direction

Directions by Train

From Takebashi Station: Take the Tozai Line to Takebashi Station. Hitotsubashi ICS is approximately 4-minute walk from Exit 1B.

From Jimbocho Station: Take the subway (Hanzomon, Shinjuku, or Mita Line) to Jimbocho Station. Hitotsubashi ICS is approximately a 3-minute walk from Exit A8.



To all participants

Time schedule for registration: 15th April 9:00~
16th April 8:30~

During the two days meeting, companies exhibition will be held in the meeting room 1,2,and looby on the 2nd floor.

15th April: 9:25~17:30

16th April: 9:00~16:00

Drink corner is available in the companies exhibition room,
Please notice that no food or drink is allowed in the main hall.

<Simultaneous Interpretation Receiver >

Free rental for Simultaneous Interpretation Receiver

However, the general instructions listed below must be followed.

- 1) Receivers can only be used in the main hall (2F).
- 2) Please do not bring it out of the conference vanue.
- 3) Please return it every day.
- 4) If you lose or broke the receiver, you will be obliged to pay.



box

Receiver



Lunch

<Lunch>

Lunch boxes will be available at 11:00~14:00 on 2nd floor

Lunch box; 1000 Yen/one.

Lunch boxes will be available at the 2nd floor

Numbers of lunch boxes are limited. 300/per day

Restaurants nearby the venue hall is also a choice,

but you must not take the receivers with you.

Before leaving the venue, please return the receivers to the conference staff.



< Notes in the venue >

1. Notes and photography and video recording is prohibited during presentations.
2. Smoking is prohibited inside the building. In addition, smoking outdoors is prohibited by law in Tokyo. Please use smoking room.
3. Eating and drinking are prohibited in Main Hall.

<Party enlistment >

Participation in party requires reservation in advance. Please ask receptionist (1st Floor). In addition, please note that there is a separate party fee. (Presenter & Invited Guest are free)

<Welcome Party >

Place: "JOSUI KAIKAN"

Date: April 15th (Sat.) 18:30~ Open

10,000 Yen,

<Well Done Party > (After Party on the map)

Place: "GAKUSHI KAIKAN" (Chinese Restaurant)

Date: 16th April (Sun) 17:30~, 7,000 Yen/per Person



Schedule Day 1

15th April (Sat)

9:00~ Registration (1st floor lobby)

9:25~9:30 Opening Ceremony (main hall)

Kunio Matsumoto

Yasuhisa Tsujimoto

9:30~10:00 Keynote Lecture (main hall)

“A Leading Bird of the Flock”

Masana Suzuki

10:00~12:00 Oral Presentation (main hall)

Chair : Itaru Yoshida

10:00~10:15

OP-01 Advantages of Microscope utilizing in Root Coverage Procedures

Tadahiko Nakano

10:15~10:30

OP-02 A case of peri-implantitis treatment using microscope

Yoshiyuki Amari

10:30~10:45

OP-03 Sinus Floor Elevation Technique, Crestal Approach
under Magnification by using Microscope

Norimitsu Nakata

Chair : Taira Kobayashi

10:45~11:00

OP-04 A case report of congenital missing of mandibular both sides lateral
incisor treated by zirconia-ceramic resin-bonded fixed partial denture

Yusuke Takayama

11:00~11:15

OP-05 The Factor that Influences Microscope Preparation Accuracy

Shinnosuke Tokuda

11:15~11:30

OP-06 Surgical Microscope with Electric Focusing Function

Chair : Takashi Okiji

11:30~12:00

OP-07 NEW CONCEPTS IN MICRO SURGERY.

Marcelo Munhoz, Daniela Barbisan

.....
12:00~12:30 Break Time
.....

12:30~14:00 Forum by Companies 1 (main hall)

12:30~13:10 Morita forum

Ergonomic Clinical Setting and Useful application of microscopes
(Setting Logic and Performance Logic from pd concept)

Hiroki Isozaki

13:20~14:00 Hakusui Trading forum

Application of the microscope in the implant treatment
~ Clinical application of Neoss implant ~

Fumiyo Yamaguchi

14:00~17:00 Symposium 1 Implant Microsurgery (main hall)

Chair : Hiromasa Kawana, Masana Suzuki

14:10 ~ 14:40 Trends and future prospective of implant therapeutics

Hideaki Katsuyama

14:40 ~ 15:10 The guidelines for using microscope in the dental implant surgery

Masahiro Minami

.....
15:10 ~ 15:30 Break Time
.....

15:30 ~ 16:00 Minimally Invasive Surgery for Soft Tissue and
Bone Grafting around Implants

Takuya Satoh

16:00 ~ 16:30 Implant Microsurgery ; Microscopy for the Maxillary Sinus
Approach and Implant Preparation

16:30 ~ 17:00 Discussion

.....
Poster Session and Video Editing Seminar are on the same time
.....

17:00~18:00 Poster Session

PP-01

Endodontic treatment of Oehlers' type3 dens invaginatus using cone-beam CT and an operating microscope

Kazuo Kitamura

PP-02

Does visual acuity decrease after use of a medical microscope?

Misunderstanding among dentist in Japan may play an adverse role to prevent the spread of dental microscope.

Daichi Miyajima

PP-03

Histological evaluation of root canal treatment using dental microscope on rat molars-EndoREZ-

Rie Yamada

PP-04

About a simple recording system in microscopic dentistry, with combining versatile products

Myungsun Kim

PP-05

About the positioning guidance for beginners, on mandibular teeth treatment with microscope

Myungsun Kim

PP-06

A case of extract primodial cyst developed in the lower molar

Kentaro Shida

PP-07

Field control for Direct Restorations using the Microscope

-Rubber Dam Isolation for anterior teeth-

Yoshihiro Sugawara

PP-08

Questionary survey of microscope use in Nihon University School of Dentistry at Matsudo.

Tadashi Kawashima

PP-09

Microscope and Denture

Kazutaka Takeuchi

PP-10

A morphological study of the root canal system and root in the mandibular first molars of a Japanese population

Makoto Suzuki

.....

18:05~18:30 Time for moving to the welcome party

.....

18:30~20:30 Welcome Party (JOSUI KAIKAN)



Day 2 16th April (Sun)

8:30~ Registration (1st floor lobby)

9:00~9:30 The 13th Annual Meeting President's Award Lecture (main hall)
Retreatment to the maxillary left second molar which the gutta-percha had
leaked from the apex

Daisuke Nagao

.....
Oral presentation(9:30~11:00), **Forum by companies**(11:00~12:30, main hall)
and **Hygienist session**(9:40~12:20, Room201-203)are on the same time
.....

9:30~11:00 Oral Presentation (main hall)

Chair: Yoshifumi Kinomoto

9:30~9:45

OP-08 Picking up a broken file from root canal with magnetic force

Takeshi Inamoto

9:45~10:00

OP-09 Combination therapy of intentional replantaion and
endodontic microsurgery for refractory apical periodontitis

Makiko Osumi

10:00~10:15

OP-10 Factors that influence osseous healing after endodontic microsurgery
for extensive radicular cysts

Takahiro Yamaguchi

Chair : Nobuyuki Tani-Ishii

10:15~10:20

OP-11 Microscope in inter-disciplinary team approach: Surgical part

Hsieh Yi-Ting

10:30 ~10:45

OP-12 Minimal Invasive Trepine Technique for Latenal Sinus Augmentation

Bor Jian Chen

10:45 ~11:00

**OP-13 Microsurgery and Er-Yag Laser Therapy: Technologies in Synergy for
Minimal Invasive Dentistry**

Bernard Dahan

.....
9:40~12:20 **Hygienist Session (Room 201-203)**

Chair : Kanichi Nakagawa, Masahiro Kozuka

9:40-10:00 **Yukina Sugiyama**

10:00-10:20 **Yuko Saito**

10:20-10:30 **Question-and-answer**

.....
10:30-10:40 **休 憩 Break Time**

.....
10:40-11:20 **Kokoro Ueda**

11:20-12:00 **Chieko Hayashi**

12:00-12:20 **Question-and-answer**
.....

11:00~12:30 **Forum by Companies 2 (main hall)**

11:00-11:40 : **Dentsply Sirona Forum**

Efficient root canal treatment using a Microscope and Wave One GOLD

~Important points before and after use of Ni-Ti files~

Masaki Tsujimoto

11:50-12:30 : **Ivoclar Vivadent Japan Forum**

Minimally Invasive Interventions for Esthetic Dentistry

(Minimally Invasive Full Mouth Rehabilitation)

Masayuki Okawa

.....
12:30~13:00 **Break Time**
.....

13:00~16:00 **Symposium 2 Challenging Tooth Preservation (main hall)**

Chair : Kazuo Kitamura, Kunio Matsumoto

13 : 00 ~ 13 : 45 **Microsurgery in periodontal regeneration**

Hajime Kitajima

13 : 45 ~ 14 : 30 **Microendodontics :**

How it contributes to the conservation of natural teeth

.....
14 : 30 ~ 14 : 45 **Break Time**
.....

14 : 45 ~ 15 : 30 **Precision Dentistry resulting by microscopes**

Morio Okaguchi

15 : 30 ~ 16 : 00 **Discussion**

.....
16:00~16:45 **Assembly Meeting, Closing Ceremony (main hall)**
.....

Keynote Lecture

A Leading Bird of the Flock

Masana Suzuki

I first applied a microscope to my practical work in 1997. And it has been 20 years since I predicted and expected the microscope to become the standard of dental treatments.

I still clearly remember the sensation when I experienced by observing an intra-oral for the first time. And at this moment, I felt certain that there will be a day when a microscope becomes mandatory for a dental treatment.

In October 2016, Japanese Association for Dental Science congress was held at Fukuoka and as for the congress symposium, microscopic dentistry was selected as a theme for the first time. This was a great pleasure to me and recognizes it as a progress of Japan Association for Dental Science.

20 years ago, my friend dentists used to tease me for my dental treatments under a microscope as talking to a silly dentist. However, for those who used to tease me at that time are nowadays, all working under a microscope.

When a microscope was applied to a dental treatment, to our practical quality will certainly increase. The amount of increase can be 1 rank, 2 ranks or unknown but when a dentist of the same careered would apply just a one device, his/her practical quality will be increased. And this can also be applied to all kinds of dental field.

At this time, as the title of the keynote lecture, I have chosen the main theme of this meeting, "Microscope leads dentistry". I wish to review my 20 years of experiences in microscopic dentistry through my clinical cases and at the same time, convey the necessity and efficacy of it.

1978-1984: Nihon University School of Dental at Matsudo, Japan

1984-1986: Associate Uehara Dental Clinic

1984-1994: Part time Associate oral surgery Nihon university school of dentistry at Matsudo.

1989-: Clinical Practice (Suzuki Dental office) in Tokyo

2007-: Adjunct Instructor Division of Oral and Maxillofacial Implantology Tsurumi University School of dental Medicine

2009-: Visiting Professor Nihon University school of Dentistry at Matsudo

Member of Society of Japan Clinical Dentistry

Member of the Japanese Society of Periodontology

Member of Japan Academy of Periodontology

Member of American Academy of Periodontology

Member of Academic of Microscope Enhanced Dentistry

Member of OJ (Osseo-integration study club of Japan)

Forum by Companies 1

Morita Forum

**Ergonomic Clinical Setting and Useful application of microscopes
(Setting Logic and Performance Logic from pd concept)**

Hiroki Isozaki

Over 20 years have passed ,since surgical microscopes for operations is applied to clinical dentistry. A large number of manufacturers have sold microscopes, but the roots is in surgical microscopes for medical departments. Therefore it can't always fit with clinical dentistry because medical doctor's priority is based on generality at operation room. When I think from stand point which is called the pd style that Dr Darryl Beach is advocating, microscopes with which fit in perfectly like human engineering doesn't exist at present. So I'd like to put the performance logic which considered a priority matter of dental examination and treatment and considered from the state of the microscopes for dentistry. I think the examination and treatment environment should be arranged from daily behavior of dental doctors from a human engineering-like point of view.

Fukuoka prefectural Kyushu Dental University graduation in 1987

A Human Performance and Informatics Institute certified in 1991

Shin-osaka Ai dental ISOZAKI office establishment in 1992

ISOZAKI dental Clinic establishment in 2000

JAMD member 2007~

JAMD certified in 2011

JEA(Japan Endodontic Association)member 2015~

Performance Logic Society Vice-president

NPO corporation pdp Director

Hakusui Trading Forum

APPLICATION OF THE MICROSCOPE IN THE IMPLANT TREATMENT

~ Clinical application of Neoss implant ~

Fumiyo Yamaguchi

Microscopes appear in various areas of Implant Therapy. The treatment of Peri-implantitis is one of those. In order to remove the biofilm adhering to the rough surface portion of fixture, it is effective to use a microscope. However, it is impossible to completely remove biofilms which entered a complex rough surface. Currently, there is no definitive treatment of peri-implant inflammations. Thus, as a matter of course the most important thing is to not suffer from peri-implant inflammations. Consequently, it is necessary to understand and work out various prevention measures that have been known to date. The control of thorough plaque control and the control of inflammation of periodontitis before surgery is naturally one; other selections of fixtures may also be mentioned as one of the preventive measures. Currently, the mainstream surface texture is a Full Rough Surface finished roughly up to the fixture neck. However, a smooth surface is more advantageous when it is less susceptible to Peri-implantitis, difficult to proceed even if it is affected, and if the surface condition is easy to handle after morbidity. Therefore, it is preferable that the surface part of the hybrid type have a smooth surface in the collar part, and minimally/moderately rough surface properties be used for the thread part. Furthermore, in addition to this hybrid type surface texture, the Neoss implant which also has hydrophilicity started to be sold in Japan last year. I would like to introduce you this time, about the Neoss implant by showing clinical examples.

1998: Graduated Showa University, School of Dentistry

2003: Japanese Society of Periodontology : Certified Dentist, specialist 2006: Opened Yamaguchi Dental Clinic in Yokohama, Japan

Japanese Society of Periodontology : Certified Dentist, Specialist The Japanese Academy of Clinical Periodontology : Member Japan Association of Microscopic Dentistry : Member Japanese Society of Oral implantology : Member Osseointegration Study Club of Japan : Member

Tokyo SJCD : Member

Symposium 1 Implant Microsurgery

Chair : Hiromasa Kawana, Masana Suzuki

Trends and future prospective of implant therapeutics

Hideaki Katsuyama

Implant therapeutics have played an important role in global dentistry due to its significant depth of scientific evidences and high predictable treatment results. At moment, in many patients, extraction would be performed on the assumption to receive implant therapeutics. Clinicians have responsibility to decide and choose necessary treatment options at tooth extraction and optimal timing of implant placement from the scientific evidences.

On the other hand, external circumstances have been changing significantly and demanded treatment side to change and correspond rapidly. The changes of external circumstances mean increased risk and complexity of treatment due to rapid aging of society, change of treatment needs and demands and rapid change from analog to digital approach. Thus, it is clear that the establishment of more predictable, low-invasive, shorter treatment protocols compared with traditional implant treatment are required at an accelerated rate. The driving forces to enable are improvement of ability and technique of clinicians by high level of education and training, penetration of infrastructure such as surgical microscope, higher level of diagnosis and treatment execution and bio-material supported by sufficient scientific evidences would be key factors. In this lecture, current trends and future prospective of implant therapeutics affected by change of external circumstances will be discussed.

Graduated from Kyushu University, Faculty of Dentistry. PhD from Graduate School Kyushu University, Department of Oral Surgery, Kyushu Japan. From 1991 to 1993 served as Research fellow, Department of Medicine, Beth Israel Hospital, Harvard Medical School, Boston, USA. From 2006 to 2014, Member of ITI Board of Directors.

Currently, he serves as Clinical Professor, Tokyo Medical and Dental University and ITI Education Delegate, ITI section Japan.

The guidelines for using microscope in the dental implant surgery

Masahiro Minami

In this session, I will describe the characteristics of periodontal microsurgery which technique can be applicable to the dental implant microsurgery. Then I'd like to discuss advantages & disadvantages in utilizing microscope in the dental implant surgery
Taking into account of these, I'd like to suggest the guidelines as follows

- 1) Using microscope is effective in incision, dissection, debridement of the bone and the root surface in the surgical area, and observation of extraction socket / drilling hole.
- 2) Surgical loupes(x3.5~5) is an alternative option when drilling procedure.
- 3) It's easy to manipulate under the microscope in releasing incision.
- 4) Surgical loupes(x3.5~5) also work well in the 5-0 ,6-0 mattress suture.
- 5) Microscope allows to establish 7-0 correct apposition suture with visual control.
- 6) Using microscope is recommended when harvesting bone from ramus, or sinus lift procedure because of the fine visual access.
- 7) Using microscope is recommended in 7-0 suture removal as well.

1986 Graduate from Osaka Dental University

1989 Hospital Staff of Honda Dental Clinic (HigashiOsaka-shi), Kihara Dental Clinic (Ikoma-shi)

1993 Set up Mikkaichi Minami Dental Office (Osaka-hu, Kawachinagano-shi)

1998 Received Ph.D. from Osaka Dental University

2003 Set up Minami Dental Office (Osaka-shi, Kita-ku)

2006 Rename the hospital as Medical Corporation Koryu-kai Minami Dental Office

Part-time lecturer of Osaka Dental University, Graduate School of Dentistry, Operative Dentistry,

Director of Japan Academy of Digital Dentistry

Councilor of Japan Association of Microscopic Dentistry

Instructor of the Japanese Academy of Clinical Periodontology

Active member of International Academy for Digital Dental Medicine

Member of American Academy of Periodontology

Member of International College of Prosthodontists
Founder of 5-D Japan

Minimally Invasive Surgery for Soft Tissue and Bone Grafting around Implants

Takuya Satoh

Dentists these days should always be looking for opportunities to reduce their patients pain. And find ways to do “Minimally Invasive“ procedures. The concept of minimal intervention dentistry became a primary approach to treat carious lesions. And these days this concept could be adapted to manage soft tissue, bone grafting and implants as a “Minimally Invasive Technique”.Especially using high magnification loupes and microscopes, this Minimally Invasive Technique makes it possible to achieve satisfying esthetic results as well as biological success. And more and more patients desire these minimally invasive techniques over conventional techniques.In my presentation, I will show very advanced cases of traumatic soft and hard tissue wounds on the maxillary anterior region, and implant esthetic complications, as well as sinus floor elevation with “Horizontal Mail Box Design”.I would like to enlighten dental practitioners in order to help them in the implementation of modern concepts into everyday surgical practice by showing my cases with Minimally Invasive Technique. I hope the application of the concept may offer a powerful option to esthetic dentists to provide less invasive treatment to their patients.

1998: Graduated Osaka Dental University. Worked at Osaka University Division for Interdisciplinary Dentistry.

2003: Completed PhD at Osaka University

2005: UCLA Periodontology Preceptorship. Worked at Dr. Sascha Jovanovic's Office as a Surgical Assistant Doctor

2006: Opened Dental Implant Center of Osaka

Club GP President

Adjunct Professor of Osaka Dental University School of Dental Technology

Specialist of Japan Prosthodontic Society

Specialist of Japan Academy of Esthetic Dentistry

Specialist of Japanese Society of Oral Implantology

Board Member of Japan Academy of Esthetic Dentistry

Board Member of Japan Academy of Digital Dentistry

Member of Japan Association of Microscopic Dentistry

Global Institute for Dental Education Faculty Member

Member of European Association for Osseointegration

Implant Microsurgery ; Microscopy for the Maxillary Sinus Approach and Implant Preparation

Eiju Sen

We practice implant microsurgery in various situations in order to break the limitation of the surgical treatment related to implant. Implant microsurgery stands on the line that extends from the theory of conventional surgery, and it should not be changed the theory itself. Microsurgery is one of surgical approaches that is simply aimed certain healing. Magnification is used for the handling of soft and hard tissue without any damages, resulting with the enhancement of the healing process at the high level. In this presentation, the superiority of microsurgery in sinus floor elevation will be reported by using the operation movies such as lateral approach, crestal approach, deal with perforation of sinus membrane, and removal of polyp in sinus by using the rigid scope. In addition, I would like to give my opinion and consideration about the guideline of pre-surgical examination in sinus floor elevation, follow-up by CT images and the principle of the augmentation from point of view of the anatomical aspects of sinus.

Oral Surgeon, Implantology, Microsurgery
85-91; Kanagawa Dental University
94-present; Sen Dental Clinic Implant & Esthetic Microscopedentistry

Member;
ITI (International Team for Implantology)
CID (Center of Implant Dentistry/Japan)
SJCD (Society of Japan Clinical Dentistry/Tokyo)
AMED (Academy of Microscope Enhanced Dentistry/USA)
JSOI (Japan Society of Oral Implantology)
JAMI (Japan Academy of Maxillofacial Implants)
JAMD (Japan Association of Microscopic Dentistry)

The 13th Annual Meeting President's Award Lecture

Retreatment to the maxillary left second molar which the gutta-percha had leaked from the apex

Daisuke Nagao

We have routinely performed endodontic therapy. Sometimes we encounter the cases by surgical endodontic therapy and tooth extraction due to the anatomical factors and complications in past root canal treatment. When we perform surgical endodontic therapy, apicoectomy is applied to anterior teeth, premolars and some molar teeth, and intentional replantation is applied to second molars. Thus, the operation method to be selected depends on the surgical site. However, surgical endodontic therapy is difficult to apply for symptomatic person and elderly person. In order to surgical invasion is added to the patient, and there are possibility that various risks may be involved in intraoperative and postoperative. Last year at the 13th JAMD academic meeting, I presented a new technique "Internal Apicoectomy" applying to the second maxillary molar with various problems and reported as cases that could be preserved and functioned minimally invasively. I have performed these technique more than 45 patients. Then I would like to show you the case which I reported last year. Furthermore, I would like to present my opinions and considerations on this new technique under the many cases so far.

Profile

Graduated from Kanagawa Dental College in 1994

Advising doctor of Japan Association of Microscopic Dentistry

Member of The American Association of Endodontists

Member of Japan Endodontic Association

Member of The Japanese Academy of Clinical Periodontology

Research Lecturer of Kanagawa Dental University

Forum by Companies 2

Dentsply Sirona Forum

Efficient root canal treatment using a Microscope and Wave One GOLD
~Important points before and after use of Ni-Ti files~

Masaki Tsujimoto

Microscope, Ni-Ti files, CBCT, Ultrasonic tips and Mineral Trioxide Aggregate have caused the paradigm shift in the Endodontic Treatment.

Especially, the development of Ni-Ti files is remarkable.

Ni-Ti files have several characteristics, such as strengthened fatigue resistance and shape memory by heat treatment.

They make it possible to do root canal shaping more safely.

However, previous studies suggest that even with the use any Ni-Ti files, there are some limitations in root canal shaping.

I will explain the following contents:

1. Pre-enlargement with the use of Microscope and Ultrasonic tips
2. the significance of establishing a Glide path
3. the importance of Patency
4. how to treat anatomical traps after the used of Ni-Ti files

Dr Masaki Tsujimoto

PhD in Cariology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan

Graduate from Nihon University School of Dentistry of Mastudo, chiba, Japan

2012 JAMD Certified physician

2014 The 9th JEA-Kantoh Suzuki Kensaku Award

2014 The 12th annual meeting of JAMD Congress President's Award

Ivoclar Vivadent Japan Forum

Minimally Invasive Interventions for Esthetic Dentistry (Minimally Invasive Full Mouth Rehabilitation)

Masayuki Okawa

Lately, favorable results are seen in many esthetic cases with minimally invasive techniques. This became possible due to the development of biomimetics, advancement in bonding technique, and treatment using the problem-based approach. In addition, the use of the microscope has allowed us to obtain precise and predictable outcomes. Using my Minimally Invasive Full Mouth Rehabilitation cases, the use and effectiveness of the microscope in direct composite, and porcelain-bonded restorations in esthetic dentistry will be discussed.

1962: Born in Iwate

1987: Graduated Tohoku Dental University of Dentistry

2001: Open and maintain Clinic in Tokyo, Japan

Tokyo SJCD: Vice-President

Academy of Microscope Enhanced Dentistry(USA): Board Member

Ohu University Faculty of Dentistry Alumni Association Academic department Director

Japan Academy of Esthetic Dentistry: Certified Dentist

Japan Academy of Gnathology and Occlusion: Certified Dentist

EAED: Affiliate Member

ivoclar vivadent: Opinion leader

USC Japan: Program Instructor

Symposium 2 Challenging Tooth Preservation

Chair : Kazuo Kitamura, Kunio Matsuoto

Microsurgery in periodontal regeneration

Hajime Kitajima

Harrel and Rees (1995) ¹ reported the focus of Minimally Invasive Surgery (MIS) was minimal wound , flap reflection, and precise handling of soft tissue. Cortellini and Tonetti (2001) found periodontal regeneration utilizing a microscope to achieve a higher rate of primary closure of papilla with a 5.4 mm clinical attachment gain.

Coretellini, Tonetti, et al. (2007) ³ further noted a Minimally Invasive Surgical Technique (MIST), which is a procedure that is less invasive than conventional periodontal regenerative surgery, and the Modified Minimally Invasive Surgical Technique (M-MIST) in 2009, which stresses the principles of space provision ⁴.

Cortellini (2012) ⁵ proposed a decision-making algorithms for a surgical approach in periodontal regeneration specifically created for intrabony defects. By means of this algorithm, practitioners can have a clear pathway for cases which may be good candidates for minimally invasive surgery or a conventional flap design (Extended Flap) procedure, and are able to decide the flap design using either regenerative materials or a suture pattern.

This presentation will describe the key points for successful MIST and M-MIST procedures and conventional flap design (Extended Flap) utilizing a microscope for various types of periodontal defects.

1. Harrel SK, Rees TD. Granulation tissue removal in routine and minimally invasive procedures. *Compend Contin Educ Dent* 1995; 16: 960, 962, 964 passim.
2. Cortellini P, Tonetti MS. Microsurgical approach to periodontal regeneration. Initial evaluation in a case cohort. *J Periodontol* 2001; 72: 559-569.
3. Cortellini P, Tonetti MS. A minimally invasive surgical technique with an enamel matrix derivative in the regenerative treatment of intra-bony defects: a novel approach to limit morbidity. *J Clin Periodontol* 2007; 34: 87-93.
4. Cortellini P, Tonetti MS. Improved wound stability with a modified minimally invasive surgical technique in the regenerative treatment of isolated interdental intrabony defects. *J Clin Periodontol* 2009; 36: 157-163.
5. Cortellini P. Minimally invasive surgical techniques in periodontal regeneration. *J Evid Based Dent Pract* 2012; 12: 89-100.

Professional Experience:

Kitajima Dental Clinic, private practice, Iwata, Shizuoka, Japan, 1990-present
Founder/instructor of 5-D Japan (Institute of periodontics, endodontics, implantology, microscopic dentistry and esthetics) 2009-present

Membership:

American Academy of Periodontology
Academy of Osseointegration
Japanese Society of Oral Implantology
Japanese Society of Periodontology
The Japanese Academy of Clinical Periodontology

Education:

Hiroshima University School of Dentistry, 1987

International Publications:

Kitajima H, Ogawa T. (2016). The Use of Photofunctionalized Implants for Low or Extremely Low Primary Stability Cases. *Int J Oral Maxillofac Implants* 2016; 31: 439-447.

Ishikawa, T., Vela-Nebot, X., Kida, K., Moroi, H., Kitajima, H., Ogawa, T., (2014). Restoration of optimal esthetics in complex clinical situations. *Journal of Cosmetic Dentistry*. Winter 2014, Vol. 29 Issue 4, p. 61-72. 12p.

Funato, A., Ishikawa, T., Kitajima, H., Yamada, M., Moroi, H., (2013). A novel combined surgical approach to vertical alveolar ridge augmentation with titanium mesh, resorbable membrane, and rhPDGF-BB: a retrospective consecutive case series.

Int J Periodontics Restorative Dent. 2013 Jul-Aug; 33 (4):437-45. doi: 10.11607/prd.1460.

Ishikawa, T., Salama, M., Funato, A., Kitajima, H., Moroi, H., Salama, H., Garber, D., (2010). Three-dimensional bone and soft tissue requirements for optimizing esthetic results in compromised cases with multiple implants.

Int J Periodontics Restorative Dent. 2010 Oct; 30 (5):503-11.

International Lectures:

2016 Association for Dental Sciences of the Republic of China 20th Annual Meeting
“Possibilities and Challenges in Periodontal Regeneration”

Microendodontics: How it contributes to the conservation of natural teeth

Takashi Okiji

The introduction of surgical operating microscopes (SOM) has changed the field of clinical endodontics fundamentally. The advantage of the SOM can be summarized as that it provides both illumination and magnification which greatly improve visual information and increase the accuracy, precision and safety of various aspects of endodontic procedures. Also, the indication of microendodontic treatment has been extended because of the continued development of new instruments and techniques. There are several endodontic procedures that greatly benefit from the use of SOM, including: (1) uncovering difficult-to-find canal orifices; (2) removing obturation materials and posts; (3) identifying cracks and fractures of the tooth root; (4) removing intracanal broken instruments; (5) repairing perforations; (6) identifying and managing the anatomic complexity such as the C-shaped canals and isthmuses; and (7) facilitating root-end resection and filling. Thus, the SOM enables us to resolve various endodontic treatment challenges that otherwise can lead to tooth loss.

This lecture aims to review on how the SOM enhance our endodontic practice and thereby contribute to the conservation of natural teeth that would otherwise require extraction.

CV

- 1984 DDS (Tokyo Medical & Dental University)
- 1988 PhD (Tokyo Medical & Dental University)
- 1996 PhD (Göteborg University)
- 2001-2003 Professor, General Dentistry & Clinical Education Unit, Niigata University Dental Hospital
- 2003-2014 Professor, Division of Cariology, Operative Dentistry & Endodontics, Graduate School of Medical & Dental Sciences, Niigata University
- 2015- Professor, Department of Pulp Biology & Endodontics, Graduate School of Medical & Dental Sciences, Tokyo Medical & Dental University (TMDU)

Precision Dentistry resulting by microscopes

Morio Okaguchi

It is the most quantum leap in my clinical Dentistry in the dental treatments by working under a microscope encountered 17 years ago.

And nowadays when a microscope became common in dentistry, it is no longer a tool to visualize treatments but its main theme is shifted to its fluent use which can reflect the precision resulted from the magnification. To have extreme results in Aesthetic treatments and to minimize the intervention, precision beyond working under the naked eyes is mandatory. To lower a gap in marginal fitting of prosthesis, to preserve as much sound tooth enamel structure, to maximize the smoothness between a tooth structure and filling materials, all of those became too difficult to achieve without a microscope.

In addition, the field that was invisible under naked eyes such as Endodontic treatments, a microscope enables visualize and treat-able those infection sources that underlies within the complicated anatomical forms. And adapting other tools like CBCT and OK micro-excavator instruments broaden the treatment options and enable to save those hopeless teeth which were diagnosed for an extraction under a conventional dentistry.

On the other hand, the one of the important treatment category in the field of Endodontic, the vital pulp preservation therapy had been dramatically changed by the presence of a microscope. Precise removals of the sight specific infected dentin under a magnified view would enable to preserve the vital pulp which was considered as nearly impossible to preserve under the standard of conventional dentistry.

Like all of the above been said, a microscope is not just a tool to see bigger but to use it fluently would have a potential to make our hands as a "God hands". Today, all of my dental treatments are performed under a microscope and I wish to talk to you the know-how of it through my clinical cases.

Education

In 1976, Graduated from Meiji University with BA degree in Economic

In 1986, graduated from Iwate Medical University, school of Dentistry

In 1993, Opened Okaguchi Dental Clinic in Tokyo

- Director of SJCD Tokyo
- Instructor of microscopic Dentistry in SJCD Tokyo
- Member of Japan Endodontic Association Kanto region
- Supervisory Doctor of Japan Academy of Clinical Dentistry
- Certified Microscope instructor at Carl Zeiss
- Member of AMED (Academy of Microscope Enhanced Dentistry)

Oral Presentation Day 1

OP-01

Advantages of Microscope utilizing in Root Coverage Procedures

Tadahiko Nakano

Introduction

Recently, demand of patient's "aesthetic" is growing. Accordingly, it has been focused on balanced gum form. It is because approximately one third of tooth labial side of crown form could be also said gum form. Consequently, as for periodontal plastic surgery, the field of aesthetic has been demanded more accurate results.

In this research publication, I will introduce the case which performed periodontal plastic surgery. It was performed on the patient who visiting my clinic with complained of aesthetic failure. At the end, I will consider the clinical significance.

case/outline

Patient who was thirty seven years old, female, and she was diagnosed with jaw deformity in 2000.

She had a pre operative correction and Intraoral vertical Ramus Osteotomy and reach to retention. She associated with orthodontist and oral surgeon.

After that, her stabilized location of tooth and level of gum has changed gradually. She come to my clinic with the chief complaint of the aesthetic failure result from gingival recession of maxillary anterior tooth and premolar region in November 2015. Fifteen years have passed since she had a surgery. She had no special notation of her medical history.

The factors which could cause non-inflammatory gingival recession are 1. Odontoparallaxis and Protruding teeth, 2. Thin scallop 3. over brushing.

This case matched all of the above.

Also it is known that the risk of gingival recession after orthodontic treatment would be higher than the person who hadn't treated. Despite of the normal dentition at near hyperopia basis, if the thickness of alveolar bone and biotype of the gingiva are thin, there are the risk of root exposure by buccolingual discrepancy. I would need re-correction or surgical approach to treat this situation.

As a result of informed consent, I decided to perform retention again and root coverage procedures by using connective tissue transplant. I chose Miller's classification I for gingival recession, and under microscope Envelop Technique for operative procedure.

Envelop Technique which does not use horizontal and vertical incision is expected good results. It is because that it would not prevent blood supply to the graft. However, it has been regarded as a drawback that it requires delicate technique to form partial thickness flap and it has a difficulty to transplant the flap to coronal. On the other hand, microsurgery could perform exactly to form flap. This flap would cover partial thickness flap over gingival sulcus to gingival alveolar mucosa border, so that it could be possible to transplant the gingival flap. There is a big merit for the blood supply to the graft and increase the completeness of surgery.

Now, it have passed about nine months, there are no change of the level of gingiva and it making a good process. The patient has been satisfied with aesthetically and functionally.

Consideration

The accurate treatment under the microscope has helped to reduce patient's burden. Moreover, this treatment is minimally invasive to the tissue so it made it possible to minimize the morphological change after transplant surgery. From these reasons, periodontal plastic surgery under microscope is the highly predictable treatment.

【Introduction】

As a prosthetic device for intermediate missing at molar, a removal denture device, a fixed denture device or an implant supported prosthetic device is used. There are many demerits from the point of view that are unnecessary invasion to adjacent tooth, overload caused by occlusion and uncomfortable feeling. In late years, the demand of implant treatment is increasing. However, it is a fact that an implant suffers from implant gingivitis and implantitis. It is due to that an implant body placed in malposition to the bone, the failure of guided bone regeneration, the wrong design of the prosthetic structure, and lack of maintenance.

This time, I report that I got a good result to peri-implantitis treatment with open flap debridement using a microscope.

【Case · Overview】

A patient is a 69-year-old man. He came in January, 2016 with the sense of incongruity and the swelling at his left side lower molar area. An anamnesis was not the important notice dentally and systemically.

In January, 2016, I performed an intraoral photograph, panoramic X-rays, 14 pieces of dental X-rays, CT photography and periodontal pocket examination.

The implant which located the mandibular left first molar area had pockets more than 8 millimeters with pus and bleeding. I suggested a surgical treatment, re-prosthesis, and the treated tooth for periodontitis. I explained the advantage and disadvantage of each cure, risk, a treatment period and an expense, postoperative management, the need for periodontal treatment about a treatment plan in informed consent.

As a result, the patient chose peri-implantitis treatment. I provided basic treatment before peri-implantitis treatment in May, 2016. I performed open flap debridement using Erwin AdvErl Evo (Morita Co., Ltd.) which is Er: YAG laser technology with PSM600T tip. An implant body surface was washed by Photo Dynamic Therapy using Periowave (Wavelengths). After that, Flap was closed with packing ArrowBone-Dental tm (BrainBasa Corporation).

The patient was making steady progress. For six weeks, I prohibited him that he brushed that position. I was allowed to hygienist brushing the area every week. After six weeks later, I allowed him brushing in the area.

Eight months after the operation, it is making satisfactory progress that the abnormal finding is not recognized in X-rays and intraoral views at an implant part and teeth.

【Consideration】

After eight months, the bone level around an implant dose not have the change, and the inflammation are not recognized after that. By this, open flap debridement using microscope was suggested that it was an effective cure in peri-implantitis treatment.

Introduction

Implant restorative treatment, especially for the maxillary sinus floor elevation technique, the key to success is to assure the cortication of the sinus floor bone and elevating position of the sinus floor membrane.

The conventional internal socket elevation technique had been presented by Summers et. al. in 1994 by using the round-end instruments called Osteotome and hammered the alveolar bone towards the sinus floor and elevate the floor membrane at the same time followed by filling of the elevated space with the bone graft material that later change to bone to place an implant.

In this technique, the reported benefit is that it is minimally invasive but it is not suitable when there is not enough bone to support the initial fixation of an implant, the incidence like perforating the sinus floor membrane due to its blind surgery technique.

However, by applying a microscope to this technique, the perforation of the sinus floor alveolar bone along with the membrane elevation can be done with accuracy and safely. The author wishes to report the case.

Clinical case and the abstract

Applying internal socket lift technique along with bone augmentation to the case where there was not enough bone thickness at the sinus area to place an implant but thick enough to obtain the initial fixation of an implant.

Under a microscope, using the sinus floor elevation drills and Piezo Electric Surgery device to corticate the sinus floor alveolar bone. After the corticotomy, using the membrane detachment instruments for crestal approach to detach the sinus floor membrane and confirmed its mobility followed by the filling of the site with bone grafting material. After healed, confirmed the bone thickness and placed an implant.

Considerations

In the conventional technique, the sinus floor membrane was elevated by the pressure of inverting the bone graft material. Control of mobility at the membrane was too complicated. Also, by hammering the sinus floor together with added bone graft materials is very technique sensitive and offering much discomforts to a patient.

In this different approach, it will not require opening of the lateral window when elevating the sinus floor membrane and it is less invasive comparing to the lateral window technique. It also allowed the three dimensional control on the mobility of the detached sinus floor membrane as much as the lateral window technique due to the condition of working under a magnified view. The author found that working under a magnified view from a microscope enables the crestal

approach of sinus floor elevation technique to be no longer a blind technique, reduce the risk of incidences and patient discomforts.

OP-04

A case report of congenital missing of mandibular both sides lateral incisor treated by zirconia-ceramic resin-bonded fixed partial denture

Yusuke Takayama

In recent years, due to advances in adhesion technology, the means and scope of MI therapy has been expanding. Treatment was performed on patients with mandibular bilateral incisors using zirconia-ceramic resin-bonded fixed partial denture.

Currently, we have started to publish the prognostic literature for 5 to 10 years with regard to the all ceramic resin-bonded fixed partial denture, but it is also a fact that there are protocols that have not been established yet. However, although it is my opinion, considering the ease of recovering with a small amount of preparation, we believe that resin-bonded fixed partial denture is sufficiently useful in this case.

OP-05

The Factor that Influences Microscope Preparation Accuracy

Shinnosuke Tokuda

No English abstract

Introduction

Dental treatment performed under magnification has become common in recent years and even dental hygienists are now required to work under a magnified field of view. Dental treatment using high-magnification surgical microscopes started spreading about 15 years ago and the rate of sales of microscopes has recently increased to approximately 500 units a year.

We herein report our verification of the superiority of surgical microscopes with an electric focusing function when used in dental hygienist work.

Summary

When dentists use surgical microscopes, a medical system based on the so-called four-hand technique, where the surgeon can concentrate on treatment by having an assistant help with securing aspiration, drying, visibility and other duties, is routine. In contrast, when dental hygienists perform medical examinations using a surgical microscope, they are often forced to handle all that work alone. Furthermore, in dental hygienist work, a single medical examination mostly involves examination and treatment of one oral unit, and the dental hygienist needs to change the position, focus, and magnification frequently or instantaneously in accordance with the target site. When using a surgical microscope, it is usually necessary for the dental hygienist to release their hand from the mirror or other instrument each time one of these changes is made. Dental hygienists end up sacrificing working efficiency within their limited examination time.

The surgical microscope used at our hospital is equipped with electric zoom and focusing functions and a foot controller can be used to change the magnification and adjust the focus without releasing one's hand from any instruments. This microscope might therefore allow for more efficient dental hygienist work. We consequently used this surgical microscope to investigate how much electric focusing and manual focusing differ in terms of treatment time.

Discussion

We found that when performing dental hygienist work, a large difference in treatment time emerges between electric and manual focusing. By using electric focusing, the entire oral cavity could be smoothly treated without taking time to change focus or magnification during the limited examination time.

Unlike dentists who treat anything from a single tooth to multiple teeth, dental hygienists, who are required to examine and treat one oral unit, felt the merits of using a surgical microscope with an electric focusing function particularly strongly.

Surgical microscopes with an electric focusing function are currently considered to enable efficient dental hygienist work. Moving forward, we hope that surgical microscopes with an electric focusing function will be actively employed in dental hygienist work.

Marcelo Munhoz, Curriculo dra Daniela Barbisan

In most cases, we must perform the non-surgical method as first choice, but in certain situations where failure to perform endodontic retreatment has occurred, in the incomplete eradication of the apical biofilm, we must indicate paraendodontic surgery. The perpetuation of periradicular pathological processes originated by the persistence of an endodontic infection, retreatment of extensive lesions with recurrences, lesions that persist in calcified apices and side ways are indications for surgical intervention.

In the paraendodontic surgery, apicetomy, the retropreparation of the apical portion and the retrofilling of these retrocavities with endodontic cements are intended to overcome the deficiencies in the apical sealing of the previously established treatment. The biological response is also related to the precision of the operative procedures. Added to this, the use of Bioceramics in the microsurgery procedures has shown an extremely biocompatible biomaterial, with excellent regeneration capacity and induction of periapical region reestablishment. We can remove to the suture in 17 hours when can we used the concepts periodontal microsurgery plastic .

In this context, the incorporation of the optical microscope into the clinical use facilitates this process as it increases the luminosity and magnification of the periapical region, also facilitates the detection of anatomical details and provides a refinement in the operative techniques in which the visual acuity is qualified and improved when Ideal optical magnification is used.

Dr Marcelo Munhoz

PhD in Endodontics at Federaral University of Rio Grande do Sul /UFRGS –Porto Alegre,RGS-BRAZIL

Master in Endodontics at University de Ribeirão Preto, São Paulo, Brazil

Graduete Degree in Maxilofacial Surgery, Universidade Luterana do Brazil

Residency in Operatory Microscopy, Orocentro, Itapetininga, SP, Brazil. #Technical Consultant in Ergonomic of Layout Company health

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Technical Consultant in Ergonomic of Layout Company health

Internacional Speaker of World Microscope Team
Private Clinical since 1994.

Oral Presentation Day2

OP-08

Picking up a broken file from root canal with magnetic force

Takeshi Inamoto

It is well known that the combine use of microscope and ultrasonic equipment is effective to remove separated files from root canals.

Furthermore the use of loop or instant adhesive are effective, too.

The other side, many dentists may use tweezers to pick up a separated file from the floor of pulp chamber.

But the gripping force of tweezers is a little weak, so that the retention power might be unsure. We have used the magnetic force for picking up the separated files on the floor of pulp chamber since before.

We will present this magnetic force technique which is very simple and easy.

OP-09

Combination therapy of intentional replantaion and endodontic microsurgery for refractory apical periodontitis

Makiko Osumi

No English abstract

OP-10

Factors that influence osseous healing after endodontic microsurgery for extensive radicular cysts

Takahiro Yamaguchi

No English abstract

OP-11

Microscope in inter-disciplinary team approach: Surgical part

Hsieh Yi-Ting

The surgical microscope offer good illumination and magnification of operative field. These advances could lead to more precious and less traumatic management. With the aid of microscope, we developed less invasive technique that favor rapid wound healing, less post-operative discomfort, stable surgical results, and greater patient satisfaction.

Our interdisciplinary teamwork was run for 10 years. In this presentation, I would like to share the journey of how to incorporate microscope into our work, and how to intensified our team work with microscope, focusing on surgical soft tissue management.

1996-2002 DDS, National Taiwan university

2002-2007 Residency, Periodontics, Taiwan university hospital

2007-Present Visiting staff, Taiwan university hospital

Private practice, periodontics, Breeze clinic in Hsinchu, Taiwan

Membership

Taiwan Academy of periodontology

European association for osseointegration

OP-12

Minimal Invasive Trepine Technique for Lateral Sinus Augmentation

Bor Jian Chen

Sinus augmentation surgery has been considered predictable bone augmentation. Implant survival rate at site of sinus augmentation is similar to native bone. However, traditional lateral window approach has been thought a traumatic surgery. The reasons for that are extensive flap design, wide window access, large membrane coverage, big sinus curette design. We started to use custom-modified sinus curette since 1999. The curette design is to have 3-4mm width and better anterior edge curvature for small access and good touch for sinus inner wall. Also, with 6-7mm diameter trephine bur, small window opening and less extensive flap design could be reached. Under microscopic magnification, surgical procedure for trephine drilling is easy to examine. My presentation will present this minimal invasive trephine technique with clinical cases and surgical video.

1. Practice Specialized to Periodontics, Implant, 1987-
2. Kaohsiung Medical University, School of Dentistry - DDS, 1981
3. Tufts University, School of Dental Medicine, Dept of Periodontology, Certificate, 1986
4. President, Taiwan Academy of Aesthetic Dentistry, 2001 – 2003
5. President, Taiwan Academy of Periodontology 2005-2007
6. President, Chinese Academy of Implant and Esthetic Dentistry 2014-2016

OP-13

Microsurgery and Er-Yag Laser Therapy

: Technologies in Synergy for Minimal Invasive Dentistry

Bernard Dahan

In the pursuit of quality of life, several fields in both Medicine and Dentistry have progressed owing to the development of new technologies.

Moreover, physicians and dentists adapt themselves and their practice in order to remain up to date with this new world.

Over 20 years ago, Dr Dennis Shannelec introduced Magnification and the Microscope in Periodontics allowing clinicians to improve skills, achieve better results and reduce trauma in Periodontal Surgery.

Parallely, in the past decade, the introduction of laser therapy and especially the Er-Yag laser, better accuracy in surgical procedures has been achieved.

The ability to adjust the Energy, Frequency, Direction and the Distance of the laser beam, gives the clinician the opportunity to be more elective, to diversify and improve his performance.

The combination of these two technologies, working in synergy and in which the priority is accuracy, enables clinicians to discover new horizons in Minimal Invasive Dentistry.

Short video clips will accompany the Presentation.

Dr Dahan completed his Dental Degree in 1976 at the TOULOUSE University, FRANCE.

In 1978 he obtained his Periodontology License from the University of MARSEILLE, FRANCE.

After his emigration to ISRAEL, Dr Dahan spent a sabbatical year in 1984, in BOSTON (USA), with two of his mentors: Dr G. Kramer and Dr M. Nevins.

Until 1991, he was in charge of the Periodontal Section at the Institute of Dental Advanced Studies in Haifa, Israel.

Dr Dahan established the Moria Periodontal Center in Haifa (1985). The center specializes exclusively in Periodontics and Implantology. Periodontists at the center work as a team, with a clear orientation to Esthetics and close cooperation with several General Dentists, Orthodontists and Prosthodontists in the North of ISRAEL.

Today, Dr Dahan concentrates his activity in Bone Regeneration, Implantology and Microsurgery.

Over and above its clinical activity, the Periodontal Center has also an Academic direction with the publication of its own MPC News Journal, the Moria Study Club where colleagues meet and discuss various cases and recently a Training Center - the Private Academy.

Dr Dahan lectures both in Israel and internationally.

He is a member of:

The Israeli Association of Periodontology and Osseointegration.

The European Federation of Periodontology.

The Association of Microscope Enhanced Dentistry.

The American Academy of Periodontology.

Poster Session

PP-01

Endodontic treatment of Oehlers' type3 dens invaginatus using cone-beam CT and an operating microscope

Kazuo Kitamura

PP-02

Does visual acuity decrease after use of a medical microscope?

Misunderstanding among dentist in Japan may play an adverse role to prevent the spread of dental microscope.

Daichi Miyajima

PP-03

Histological evaluation of root canal treatment using dental microscope on rat molars-EndoREZ-

Rie Yamada

PP-04

About a simple recording system in microscopic dentistry, with combining versatile products

Myungsun Kim

PP-05

About the positioning guidance for beginners, on mandibular teeth treatment with microscope

Myungsun Kim

PP-06

A case of extract primodial cyst developed in the lower molar

Kentaro Shida

PP-07

Field control for Direct Restorations using the Microscope

-Rubber Dam Isolation for anterior teeth-

Yoshihiro Sugawara

PP-08

Questionary survey of microscope use in Nihon University School of Dentistry at Matsudo.

Tadashi Kawashima

PP-09

Microscope and Denture

Kazutaka Takeuchi

PP-10

**A morphological study of the root canal system and root in the mandibular first molars
of a Japanese population**

Makoto Suzuki

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