

- P-1-1** Multicenter study on the polymorphisms of the cytokines for TMJD  
—A preliminary report—
- Kaoru Kanazawa<sup>1</sup>, Takanori Shibata<sup>1</sup>, Ritsuo Takagi<sup>2</sup>, Kenji Kakudo<sup>3</sup>,  
Hakubun Yonezu<sup>4</sup>, Koji Kino<sup>5</sup>, Yoshioki Hamamoto<sup>6</sup>, Eirou Kubota<sup>7</sup>  
<sup>1</sup>Health Sciences University of Hokkaido, School of Dentistry, <sup>2</sup>Niigata University, <sup>3</sup>Osaka Dental University, <sup>4</sup>Tokyo Dental College, <sup>5</sup>Tokyo Medical and Dental University, <sup>6</sup>Yamagata University, <sup>7</sup>Kanagawa Dental College, Japan
- P-1-2** Dynamic study of the specific bone metabolism marker in the synovial fluid of patient with TMJ internal derangement
- Takeshi Wakita<sup>1</sup>, Kenichi Kurita<sup>1</sup>  
<sup>1</sup>The First Department of Oral and Maxillofacial Surgery, School of Dentistry, Aichi-Gakuin University, Japan
- P-1-3** Induction of osteoclast-like cells derived from the synovial fluids of patients with temporomandibular joint disorders
- Hiroshi Takano<sup>1</sup>, Wataru Ariyoshi<sup>1</sup>, Takahiro Kanno<sup>2</sup>, Hisashi Ichimiya<sup>1</sup>,  
Takaaki Matayoshi<sup>1</sup>, Tetsu Takahashi<sup>1</sup>  
<sup>1</sup>Division of Oral and Maxillofacial Reconstructive Surgery, Kyushu Dental College, <sup>2</sup>Department of Oral and Maxillofacial Surgery, Kagawa Prefectural Central Hospital, Japan
- P-1-4** The activation of NF- $\kappa$ B in synovial fibroblasts by microparticles released from monocytes.
- Toshiaki Morisugi<sup>1</sup>, Yasuharu Tanaka<sup>2</sup>, Tetsuji Kawakami<sup>1</sup>, Naoyuki Oheda<sup>1</sup>,  
Tadaaki Kirita<sup>1</sup>  
<sup>1</sup>Department of Oral and Maxillofacial Surgery, Nara Medical University, <sup>2</sup>Department of Biochemistry, Nara Medical University, Japan
- P-1-5** Regulated factors of NF- $\kappa$ B activity induced by uni-axial mechanical stretch in lapine synovial fibroblasts
- Naoyuki Oheda<sup>1</sup>, Toshiaki Morisugi<sup>1</sup>, Yasuharu Tanaka<sup>2</sup>, Tetsuji Kawakami<sup>1</sup>,  
Tadaaki Kirita<sup>1</sup>  
<sup>1</sup>Department of Oral and Maxillofacial Surgery, Nara Medical University, <sup>2</sup>Department of Biochemistry, Nara Medical University, Japan

**P-1-6** Mechanism of protection against IL-1 $\beta$  -induced cartilage degradation by pretreatment with TGF- $\beta$  : Involvement of TIMPs and proMMP-3

○Katsuhito Nakashima<sup>1</sup>, Kyoko Yamashita<sup>2</sup>, Kenichi Kurita<sup>1</sup>

<sup>1</sup>The First Department of Oral and Maxillofacial Surgery, School of Dentistry, Aichi-Gakuin University,

<sup>2</sup>Department of Biochemistry, School of Dentistry, Aichi-Gakuin University, Japan

**P-1-7** MMP-3 activation is a hallmark indicating an early change in TMJ disorders, and is closely related to nitration

○Hirohito Fujita<sup>1</sup>, Toshiaki Morisugi<sup>2</sup>, Tetsuji Kawakami<sup>2</sup>, Tadaaki Kirita<sup>2</sup>,

Yasurou Yoshimura<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, Shimane University Faculty of Medicine, <sup>2</sup>Department of

Oral and Maxillofacial Surgery, Nara Medical University, Japan

**P-2 Basic Science**

**9 : 45~10 : 30**

**Chairperson : H. Mizutani**

**P-2-1** The multilineage differentiation potential of synovial lining cells derived from human temporomandibular joint

○Hirokazu Nagai<sup>1</sup>, Akira Nakata<sup>1</sup>, Youichi Iwanami<sup>1</sup>, Masayuki Fukuda<sup>1</sup>,

Youji Miyamoto<sup>1</sup>

<sup>1</sup>Division of Dentistry and Oral Surgery, Akita University Hospital, Japan

**P-2-2** Chondroprogenitor cells for articular cartilage in the surface zone of bovine cartilage

○Shintaro Hattori<sup>1</sup>, Katsuhiko Kimoto<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Rehabilitation, Prosthetics, Kanagawa Dental College, Japan

**P-2-3** Discovery of genes specifically expressed in mandibular condylar cartilage.

○Junichi Watahiki<sup>1</sup>, Tetsutaro Yamaguchi<sup>1</sup>, Tarou Irie<sup>2</sup>, Tetsuhiko Tachikawa<sup>2</sup>,

Koutaro Maki<sup>1</sup>

<sup>1</sup>Department of Orthodontics, School of Dentistry, Showa University, <sup>2</sup>Department of Oral Pathology, School of Dentistry, Showa University, Japan

**P-2-4** Runx2 regulates mandibular condylar cartilage development

○Takako Shimizu<sup>1,2,3</sup>, Hitoshi Nagatsuka<sup>4</sup>, Hidetsugu Tsujigiwa<sup>4</sup>, Takehiro Watanabe<sup>1,3</sup>,  
Norimasa Okafuji<sup>3</sup>, Noriyuki Nagai<sup>4</sup>, Toshiyuki Kawakami<sup>1,2</sup>

<sup>1</sup>Hard Tissue Pathology Unit, Matsumoto Dental University Graduate School of Oral Medicine, <sup>2</sup>Hard Tissue Pathology Unit, Matsumoto Dental University Institute for Oral Science, <sup>3</sup>Department of Orthodontics, Matsumoto Dental University School of Dentistry, <sup>4</sup>Department of Oral Pathology and Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan

**P-2-5** Influence of osteoclast activity on mandibular condyle growth in osteoprotegerin-deficient mice

○Masakazu Kimura<sup>1</sup>, Ken Miyazawa<sup>1</sup>, Masako Tabuchi<sup>1</sup>, Hatsuhiko Maeda<sup>2</sup>,  
Yoichiro Kameyama<sup>2</sup>, Shigemi Goto<sup>1</sup>

<sup>1</sup>Department of Orthodontics, School of Dentistry, Aichi-Gakuin University, <sup>2</sup>Department of Pathology, School of Dentistry, Aichi-Gakuin University, Japan

**P-2-6** TRPV channel expression in the synovial membrane of the rat temporomandibular joint

○Mizuho Kido<sup>1</sup>, Hideki Ioi<sup>2</sup>, Takayoshi Yamaza<sup>1</sup>, Teruo Tanaka<sup>1</sup>

<sup>1</sup>Department of Oral anatomy and Cell Biology, Graduate School of Dental Science, Kyushu University, <sup>2</sup>Department of Orthodontics, Graduate School of Dental Science, Kyushu University, Japan

**P-2-7** Capsaicin receptor expression in the rat temporomandibular joint

○Hideki Ioi<sup>1</sup>, Mizuho Kido<sup>2</sup>, Takayoshi Yamaza<sup>2</sup>, Shunsuke Nakata<sup>1</sup>,  
Akihiko Nakasima<sup>1</sup>, Teruo Tanaka<sup>2</sup>

<sup>1</sup>Department of Orthodontics, Graduate School of Dental Science, Kyushu University, <sup>2</sup>Department of Anatomy and Cell Biology, Graduate School of Dental Science, Kyushu University, Japan

**P-3 Pathology/Anatomy**

**9 : 00~9 : 45**

**Chairperson : T. Kawamoto**

**P-3-1** Effects of Bleomycin on the mandibular condyles of growing rats

○Hirohisa Furuta<sup>1</sup>, Masamori Harada<sup>1</sup>, Akihiko Sakatoku<sup>1</sup>, Toko Hayakawa<sup>1</sup>,  
Chisako Inoue<sup>1</sup>, Yohei Sugiura<sup>1</sup>, Seidai Kamiya<sup>1</sup>, Yoshihiko Sugita<sup>1</sup>, Emiko Sato<sup>1</sup>,  
Hatsuhiko Maeda<sup>1</sup>, Yoichiro Kameyama<sup>1</sup>

<sup>1</sup>Department of Pathology, School of Dentistry, Aichi-Gakuin University, Japan

**P-3-2** Effects of Vinblastine on the mandibular condyles of growing rats

○Masamori Harada<sup>1</sup>, Yohei Sugiura<sup>1</sup>, Hirohisa Furuta<sup>1</sup>, Seidai Kamiya<sup>1</sup>,  
Akihiko Sakatoku<sup>1</sup>, Kayoko Ohtsuki<sup>1</sup>, Yoshihiko Sugita<sup>1</sup>, Emiko Sato<sup>1</sup>,  
Hatsuhiko Maeda<sup>1</sup>, Yoichiro Kameyama<sup>1</sup>

<sup>1</sup>Department of Pathology, School of Dentistry, Aichi-Gakuin University, Japan

**P-3-3** Age changes of the mandibular condyle in rats

○Takashi Umebayashi<sup>1</sup>, Shinsaku Morikawa<sup>1</sup>, Masato Jinno<sup>1</sup>, Tsuneharu Hayashi<sup>1</sup>,  
Mitsuhiro Takayama<sup>1</sup>, Toshimi Kosaka<sup>1</sup>, Nagisa Fukumura<sup>1</sup>, Yoshihiko Sugita<sup>1</sup>,  
Emiko Sato<sup>1</sup>, Hatsuhiko Maeda<sup>1</sup>, Yoichiro Kameyama<sup>1</sup>

<sup>1</sup>Department of Pathology, School of Dentistry, Aichi-Gakuin University, Japan

**P-3-4** Immunohistochemical study of the effects of experimental abnormal occlusion on the mandibular condyles of spontaneous diabetic rats

○Yohei Sugiura<sup>1</sup>, Seidai Kamiya<sup>1</sup>, Satoshi Takeuchi<sup>1</sup>, Norio Yoshida<sup>1</sup>,  
Nagisa Fukumura<sup>1</sup>, Kayoko Ohtsuki<sup>1</sup>, Yoshihiko Sugita<sup>1</sup>, Emiko Sato<sup>1</sup>,  
Hatsuhiko Maeda<sup>1</sup>, Yoichiro Kameyama<sup>1</sup>

<sup>1</sup>Department of Pathology, School of Dentistry, Aichi-Gakuin University, Japan

**P-3-5** Bone histomorphometric characters of the mandible in senescence-accelerated mice (SAM)P8 with temporomandibular joint osteoarthritis by comparing with those in SAMP6 with osteoporosis

○Yuki Daigo<sup>1</sup>, Takashi Matsuura<sup>1</sup>, Michituna Katafuchi<sup>1</sup>, Kentaro Tokutomi<sup>1</sup>,  
Takashi Tsuzuki<sup>1</sup>, Masatsugu Ishikawa<sup>1</sup>, Hironobu Sato<sup>1</sup>

<sup>1</sup>Department of Oral Rehabilitation Section of Fixed Prosthodontics, Fukuoka Dental College, Japan

**P-3-6** Effect of tumor necrosis factor- $\alpha$  antibody injection on cartilage in antigen-induced arthritis of the rabbit temporomandibular joint

○Manabu Habu<sup>1</sup>, Kazuhiro Tominaga<sup>1</sup>, Yuriko Hirota<sup>1</sup>, Jinichi Fukuda<sup>1</sup>

<sup>1</sup>Maxillofacial Diagnostic and Surgical Science, Oral and Maxillofacial Surgery, Kyushu Dental College, Japan

**P-3-7** The effect of intra-articular fracture of the sheep temporomandibular joint 1<sup>st</sup> report

○Kazuo Abe<sup>1</sup>, Jun-Ichi Ishimaru<sup>2</sup>, Toshiyuki Shibata<sup>3</sup>, Kenichi Kurita<sup>4</sup>, Alastair N. Goss<sup>5</sup>

<sup>1</sup>Department of Oral-Maxillofacial Surgery, Kouseiren Takaoka Hospital, <sup>2</sup>Department of Oral-Maxillofacial Surgery, Gifu Prefectural Hospital, <sup>3</sup>Department of Oral and Maxillofacial Surgery, Medical School, University of Gifu, <sup>4</sup>First Department of Oral and Maxillofacial Surgery, School of Dentistry, Aichi-Gakuin University, Japan, <sup>5</sup>Oral and Maxillofacial Surgery Unit, Dental School, University of Adelaide, Australia

**P-4 Survey/Statistical Analysis**

**9 : 45~10 : 30**

**Chairperson : R. Furuya**

**P-4-1** Patients with temporomandibular joint disorders seen in the prosthodontics and in the temporomandibular disorders

○Masahiko Funato<sup>1</sup>, Ryuta Kataoka<sup>2</sup>, Ryoichi Furuya<sup>1</sup>, Koji Kino<sup>3</sup>, Yugo Abe<sup>1</sup>,  
Tadaharu Kawawa<sup>1</sup>

<sup>1</sup>Department of Prosthodontics, Showa University School of Dentistry, <sup>2</sup>Department of Oral and Maxillofacial Surgery, Showa University School of Dentistry, <sup>3</sup>Temporomandibular Joint and Occlusion, Comprehensive Oral Health Care, Comprehensive Patient Care, Graduate School, Tokyo Medical and Dental University, Japan

**P-4-2** Relationship between sex, age, classification of mandibular head, and the minimum thickness of the roof of the glenoid fossa in normal temporomandibular joints

○Naoto Kijima<sup>1</sup>, Kazuya Honda<sup>2</sup>, Yosuke Kuroki<sup>1</sup>, Kunihito Matsumoto<sup>2</sup>, Jun Sakabe<sup>1</sup>,  
Motohiro Kikuchi<sup>1</sup>, Shoji Kawashima<sup>2</sup>, Ichiro Nakajima<sup>1</sup>

<sup>1</sup>Department of Pediatric Dentistry, School of Dentistry, Nihon University, <sup>2</sup>Department of Oral and Maxillofacial Radiology, School of Dentistry, Nihon University, Japan

**P-4-3** A trial of Web-based teledentistry system for temporomandibular disorders patients

○Naoki Sakurai<sup>1</sup>, Shoji Kohno<sup>1</sup>, Takafumi Hayashi<sup>2</sup>, Hidemasa Nishiyama<sup>2</sup>,  
Ritsuo Takagi<sup>3</sup>, Kazuhiro Yamada<sup>4</sup>, Shuichi Nomura<sup>5</sup>, Yoshiaki Arai<sup>6</sup>, Kazuto Terada<sup>6</sup>,  
Hisashi Miyajima<sup>7</sup>, Kazumasa Kato<sup>8</sup>, Akiko Hosagai<sup>1</sup>, Hisao Ajima<sup>3</sup>, Naoko Ii<sup>5</sup>

<sup>1</sup>Division of Removable Prosthodontics, <sup>2</sup>Division of Oral and Maxillofacial Radiology, <sup>3</sup>Division of Oral and Maxillofacial Surgery, <sup>4</sup>Division of Orthodontics, <sup>5</sup>Division of Oral Health in Aging and Fixed Prosthodontics, Niigata University Graduate School of Medical and Dental Sciences, <sup>6</sup>TMJ Clinic, Niigata University Medical and Dental Hospital, <sup>7</sup>Department of Dentistry and Oral Surgery, Aizu Chuo Hospital, <sup>8</sup>Institute of Oral Science, Matsumoto Dental University, Japan

**P-4-4** Retrospective survey of TMD patients with a computerized medical information system

○Hisahiro Takeuchi<sup>1</sup>, Masanori Nakano<sup>1</sup>, Eiichi Bando<sup>1</sup>, Maki Hosoki<sup>1</sup>,  
Keisuke Nishigawa<sup>1</sup>, Toyoko Satsuma<sup>1</sup>, Teruaki Ishikawa<sup>1</sup>

<sup>1</sup>Department of Fixed Prosthodontics, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan

**P-4-5** Research on the actual application of the TMD reporting system of Tokushima University Hospital

○Fumihiro Matsumoto<sup>1</sup>, Teruaki Ishikawa<sup>2</sup>, Hisahiro Takeuchi<sup>2</sup>, Kenji Fujisawa<sup>3</sup>,  
Hidehiko Hosoki<sup>4</sup>, Masaru Hada<sup>5</sup>, Masanori Nakano<sup>2</sup>, Masaru Nagayama<sup>3</sup>

<sup>1</sup>Center for Special Dental Care, Tokushima University Medical and Dental Hospital, <sup>2</sup>Department of Fixed Prosthodontics, <sup>3</sup>Department of Oral and Maxillofacial Surgery, <sup>4</sup>Department of Oral and Maxillofacial Radiology, <sup>5</sup>Department of Oral Maxillofacial Prosthodontics and Implantology, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan

**P-4-6** Risk factors related to joint pain of the temporomandibular joint

○Tetsuya Yoshikawa<sup>1</sup>, Shigeru Kadowaki<sup>2</sup>, Kazuyuki Minowa<sup>3</sup>, Akemi Matsuda<sup>4</sup>,  
Nobuo Inoue<sup>5</sup>, Yasunori Totsuka<sup>1</sup>

<sup>1</sup>Oral and Maxillofacial Surgery, Department of Oral Patho-biological Science, Graduate School of Dental Medicine, Hokkaido University, <sup>2</sup>Nikikai Dental Clinic, <sup>3</sup>Clinic of Temporomandibular Disorders, Center for Advanced Oral Medicine, Hokkaido University, <sup>4</sup>Oral and Maxillofacial Surgery, Sapporo Hospital of Hokkaido Railway Company, <sup>5</sup>Geriatric Stomatology, Department of Oral Health Science, Graduate School of Dental Medicine, Hokkaido University, Japan

**P-4-7** Clinico-statistical study of orthodontic patients with temporomandibular joint disorders

○Keiko Tsuji<sup>1</sup>, Hidetaka Satake<sup>1</sup>, Shinji Fujihara<sup>1</sup>, Takashi Izawa<sup>1</sup>, Shinya Horiuchi<sup>1</sup>, Keiji Moriyama<sup>1</sup>

<sup>1</sup>Department of Orthodontics and Dentofacial Orthopedics, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan

**P-5** Physiology/Anatomy/Other      9 : 00~9 : 45      Chairperson : Y. Kitagawa

**P-5-1** Splenius muscle activities evoked by rat temporomandibular joint stimulation

○Masaki Kobayashi<sup>1</sup>, Tadachika Yabushita<sup>1</sup>, Kazuo Toda<sup>2</sup>, Kunimichi Soma<sup>1</sup>

<sup>1</sup>Orthodontic Science, Department Orofacial Development and Function, Division Oral Sciences, Graduate School Tokyo Medical & Dental University, <sup>2</sup>Division Integrative Sensory Physiology, Department Developmental and Reconstructive Medicine, Graduate School of Biomedical Sciences, Nagasaki University, Japan

**P-5-2** An electrophysiological study on functional changes of rat temporomandibular joint mechanoreceptors induced by lateral shift of the mandible

○Satoshi Kokai<sup>1</sup>, Tadachika Yabushita<sup>1</sup>, Kazuo Toda<sup>2</sup>, Kunimichi Soma<sup>1</sup>

<sup>1</sup>Orthodontic Science, Tokyo Medical and Dental University, <sup>2</sup>Integrative Sensory Physiology, Nagasaki University, Japan

**P-5-3** Evaluation of the articular disc deformation volume during biting

○Eiji Hosoi<sup>1</sup>, Tetuji Kawakami<sup>1</sup>, Tomohiro Inoue<sup>1</sup>, Hideto Ootuki<sup>1</sup>, Tadaaki Kirita<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, Nara Medical University, Japan

**P-5-4** Influence of clenching power on cerebral cortex blood flow

○Tomotaka Takeda<sup>1</sup>, Mami Shibusawa<sup>1</sup>, Kazunori Nakajima<sup>1</sup>, Atsushi Shimada<sup>1</sup>, Keiichi Ishigami<sup>1</sup>

<sup>1</sup>Department of Sports Dentistry, Tokyo Dental College, Japan

**P-5-5** Light therapy using linearly polarized light in the near-infrared portion of the spectrum enhances parasympathetic activity and decreases sympathetic activities.

○Koji Kashima<sup>1</sup>, Maho Yoshida<sup>1</sup>, Yosaku Suehiro<sup>1</sup>, Kaori Igawa<sup>1</sup>, Hideo Kurokawa<sup>1</sup>, Sumio Sakoda<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, Miyazaki Medical College, Japan

**P-5-6** Biomechanical analysis of three-dimensional models of anteroposteriorly shortened mandibular condyles

○Atsushi Murayama<sup>1</sup>, Tsunehisa Shimoda<sup>2</sup>, Kiwako Izumi<sup>1</sup>, Ryuji Uchida<sup>1</sup>,  
Shuhei Sumiyoshi<sup>1</sup>, Tetsuro Ikebe<sup>1</sup>, Satoru Ozeki<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, Fukuoka Dental College, <sup>2</sup>Chuo Dent-Oral and Maxillofacial Surgery Clinic, Japan

**P-5-7** The effect of unilateral mandibular lengthening by gradual distraction on the canine temporomandibular joint

○Hizuru Miyamoto<sup>1</sup>, Hisao Shigematsu<sup>1</sup>, Seiji Suzuki<sup>1</sup>, Hideaki Sakashita<sup>1</sup>

<sup>1</sup>Oral and Maxillofacial Surgery Unit 2, Department of Diagnostic & Therapeutic Sciences, Meikai University School of Dentistry, Japan

**P-6 Electromyogram**

**9 : 45~10 : 15**

**Chairperson : Y. Terada**

**P-6-1** Relationship between electromyographic spectral characteristics and intramuscular haemodynamics in human masseter muscle

○Masayuki Ota<sup>1</sup>, Tadashi Nagashima<sup>1</sup>, Takahiro Ono<sup>1</sup>, Takashi Nokubi<sup>1</sup>

<sup>1</sup>Division of Oromaxillofacial Regeneration, Osaka University Graduate School of Dentistry, Japan

**P-6-2** Trumpeter and TMD : Evaluation from thermography and electromyogram

○Kazunori Nakajima<sup>1</sup>, Tomotaka Takeda<sup>1</sup>, Atsushi Shimada<sup>1</sup>, Keiichi Ishigami<sup>1</sup>

<sup>1</sup>Department of Sports Dentistry, Tokyo Dental College, Japan

**P-6-3** Clenching event determination utilizing a newly developed portable EMG system

○Masanori Fujisawa<sup>1</sup>, Yoshihisa Gohdo<sup>1</sup>, Norimasa Tanabe<sup>1</sup>, Kiyotaka Kanemura<sup>1</sup>,  
Kanji Ishibashi<sup>1</sup>

<sup>1</sup>Department of Fixed Prosthodontics, School of Dentistry, Iwate Medical University, Japan

**P-6-4** Sensory, pain, and reflex thresholds to various stimulus modalities

○Osamu Komiyama<sup>1</sup>, Misao Kawara<sup>1</sup>

<sup>1</sup>Department of Clinical Oral Physiology, School of Dentistry at Matsudo, Nihon University, Japan

- P-7-1** Investigation of relationship between occlusal chief complaint and psychiatric disorders of the dental patient —Cases of the patient visited at occlusion clinic—
- Katsushi Tamaki<sup>1</sup>, Hiroyuki Wake<sup>1</sup>, Tatsunori Ikeda<sup>1</sup>, Hideo Miyachi<sup>2</sup>, Hitoshi Miyaoka<sup>2</sup>  
<sup>1</sup>Occlusion Clinic, Kanagawa Dental College Hospital, <sup>2</sup>Department of Psychiatry, Kitasato University School of Medicine, Japan
- P-7-2** Psychiatric investigations of the patient in dental comprehensive clinic —Characteristics of dental patient required psychiatric management—
- Tatsunori Ikeda<sup>1</sup>, Katsushi Tamaki<sup>1</sup>, Hiroyuki Wake<sup>1</sup>, Hideo Miyachi<sup>2</sup>, Hitoshi Miyaoka<sup>2</sup>  
<sup>1</sup>Occlusion Clinic, Kanagawa Dental College Hospital, <sup>2</sup>Department of Psychiatry, Kitasato University School of Medicine, Japan
- P-7-3** The validity of newly developed hand-held monitor of salivary amylase activity in TMD (Preliminary report)
- Yuko Sugiyama<sup>1</sup>, Kazuhiko Hashimoto<sup>1</sup>, Daisuke Kobayashi<sup>1</sup>, Wataru Muraoka<sup>1</sup>, Hiroko Ikeda<sup>1</sup>, Aki Tagami<sup>1</sup>, Taneaki Nakagawa<sup>1</sup>, Koichi Wajima<sup>1</sup>  
<sup>1</sup>Department of Dentistry of Oral Surgery, School of Medicine, Keio University, Japan
- P-7-4** Food intake difficulty in patients with temporomandibular disorders
- Tadasu Haketa<sup>1</sup>, Koji Kino<sup>1</sup>, Masashi Sugisaki<sup>2</sup>, Noriyuki Narita<sup>3</sup>, Toshihisa Shibuya<sup>1</sup>, Takayuki Ishikawa<sup>1</sup>, Michiko Takaoka<sup>1</sup>, Fumiaki Sato<sup>4</sup>, Nahoko Yoshida<sup>2</sup>, Eri Kuruma<sup>2</sup>  
<sup>1</sup>Temporomandibular Joint and Occlusion, Graduate School, Tokyo Medical and Dental University, <sup>2</sup>Department of Dentistry, Jikei University School of Medicine, <sup>3</sup>Department of Stomatognathic Science and Occlusion, Nihon University School of Dentistry at Matsudo, <sup>4</sup>Maxillofacial Surgery, Graduate School, Tokyo Medical and Dental University, Japan
- P-7-5** Version-up of miniature bruxism detection device and its clinical effectiveness.
- Hajime Minakuchi<sup>1</sup>, Chiyomi Nagamatsu<sup>1</sup>, Kenji Maekawa<sup>1</sup>, Manabu Kanyama<sup>1</sup>, Yoshizou Matsuka<sup>1</sup>, Takuo Kuboki<sup>1</sup>  
<sup>1</sup>Department of Oral Maxillofacial Rehabilitation, School of Medicine, Dentistry and Pharmaceutical Science, Okayama University, Japan
- P-7-6** Relationship between severity of sleep bruxism and prevalence of TMD signs and symptoms in an adolescent population.
- Chiyomi Nagamatsu<sup>1</sup>, Hajime Minakuchi<sup>1</sup>, Kenji Maekawa<sup>1</sup>, Manabu Kanyama<sup>1</sup>, Yoshizou Matsuka<sup>1</sup>, Takuo Kuboki<sup>1</sup>  
<sup>1</sup>Department of Oral and Maxillofacial Rehabilitation, School of Medicine, Dentistry and Pharmaceutical Science, Okayama University, Japan

**P-7-7** The influence of resting the cheek on the hand in mandible and temporomandibular joint

○Joji Takayanagi<sup>1</sup>, Shigeyuki Matsui<sup>1</sup>, Yuichiro Otsuka<sup>1</sup>, Satoru Kobayashi<sup>1</sup>,  
Hiromi Kaneko<sup>1</sup>, Yosuke Sakurai<sup>1</sup>, Hideharu Kanegae<sup>1</sup>

<sup>1</sup>Department of Human and Development and Fostering Division of Orthodontics, School of Dentistry, Meikai University, Japan

**P-8 Diagnostic Imaging**

**9 : 45~10 : 30**

**Chairperson : M. Sugisaki**

**P-8-1** Cone-beam CT (CB Throne<sup>®</sup>) applied to temporomandibular joint lesions.

○Hakubun Yonezu<sup>1</sup>, Takahiko Shibahara<sup>1</sup>, Aya Yajima<sup>2</sup>, Mai Ohkubo<sup>2</sup>,  
Mika Yamamoto<sup>2</sup>, Takamichi Otonari<sup>2</sup>, Tsukasa Sano<sup>2</sup>

<sup>1</sup>Department of Oral & Maxillofacial Surgery, Tokyo Dental College, <sup>2</sup>Department of Oral & Maxillofacial Radiology, Tokyo Dental College, Japan

**P-8-2** The evaluation of deformed condylar heads and their morphological changes with splint therapy using 3D cone-beam CT

○Masaru Sakai<sup>1</sup>, Satoshi Adachi<sup>2</sup>, Masako Komatsu<sup>2,3</sup>, Hideharu Hibi<sup>4</sup>

<sup>1</sup>Sakai Orthodontic Office, <sup>2</sup>Adachi Orthodontic Office, <sup>3</sup>Komatsu Orthodontic Office, <sup>4</sup>Department of Oral and Maxillofacial Surgery, School of Medicine, Nagoya University, Japan

**P-8-3** Focal fatty deposition in the mandibular condyle

○Naoya Kakimoto<sup>1</sup>, Tore A. Larheim<sup>2</sup>, Per-Lennart Westesson<sup>3</sup>, Shumei Murakami<sup>1</sup>,  
Souhei Furukawa<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Radiology, Osaka University Graduate School of Dentistry, Japan, <sup>2</sup>Department of Maxillofacial Radiology, Faculty of Dentistry, University of Oslo, Norway, <sup>3</sup>Division of Diagnostic and Interventional Neuroradiology, Department of Imaging Science, University of Rochester School of Medicine and Dentistry, USA

**P-8-4** Characteristic MR finding of temporomandibular disorders in children

○Ichiro Ogura<sup>1</sup>, Shintaro Mori<sup>1</sup>, Masashi Sakayanagi<sup>1</sup>, Yuzo Fujita<sup>1</sup>, Masataka Kato<sup>1</sup>,  
Miya Kamada<sup>1</sup>, Yoshie Yamashita<sup>1</sup>, Mitsuaki Yamashiro<sup>1</sup>, Takashi Kaneda<sup>1</sup>

<sup>1</sup>Department of Radiology, Nihon University School of Dentistry at Matsudo, Japan

**P-8-5** Determination of the behavior of articular disks during mandibular movement with ultra-high speed MR imaging —Initial report— Studies on mouth opening-closing movement in healthy dentulous subjects

○Akiko Morita<sup>1</sup>, Kentaroh Nakamura<sup>2</sup>, Munetoshi Takamura<sup>3</sup>, Kenji Morita<sup>1</sup>

<sup>1</sup>Forest Dental Clinic-Orthodontic Dentistry, <sup>2</sup>Nakamura Dental Clinic, <sup>3</sup>Medical Satellite Yaesu Clinic, Japan

**P-8-6** Changes of magnetic resonance imaging of the temporomandibular joint before and after mandibular distraction osteogenesis

○Masayuki Fukuda<sup>1</sup>, Youji Miyamoto<sup>1</sup>, Akira Nakata<sup>1</sup>, Hiroshi Takano<sup>1</sup>, Hirokazu Nagai<sup>1</sup>  
<sup>1</sup>Division of Dentistry and Oral Surgery, Akita University Hospital, Japan

**P-8-7** The influence of oral disease without asymptomatic joint at bone metabolism of the temporomandibular joint

○Michio Toyama<sup>1</sup>, Yoshihiko Sasaki<sup>1</sup>, Makoto Tsuchimochi<sup>1</sup>  
<sup>1</sup>Department of Oral and Maxillofacial Radiology, School of Dentistry at Niigata, The Nippon Dental University, Japan

**P-9 Mandibular Movement**

**9 : 00~9 : 45**

**Chairperson : K. Koyano**

**P-9-1** Evaluation of stomatognathic function with six-degree-of-freedom jaw tracking device for chairside use

○Teruaki Ishikawa<sup>1</sup>, Eiichi Bando<sup>1</sup>, Masanori Nakano<sup>1</sup>, Keisuke Nishigawa<sup>1</sup>,  
Hisahiro Takeuchi<sup>1</sup>, Maki Hosoki<sup>1</sup>, Toyoko Satsuma<sup>1</sup>  
<sup>1</sup>Department of Fixed Prosthodontics, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan

**P-9-2** Accuracy and resolution of WinJaw<sup>®</sup> EPA (Electric Position Analyzer)

○Yojiro Atsumi<sup>1</sup>, Yoshihiro Sugawara<sup>1</sup>, Mototaka Goto<sup>1</sup>, Miwa Shirono<sup>1</sup>,  
Michio Toyama<sup>2</sup>, Kazuhiro Nagata<sup>1</sup>  
<sup>1</sup>TMD Clinic, The Nippon Dental University, Niigata Hospital, <sup>2</sup>Radiology, The Nippon Dental University, Niigata Hospital, Japan

**P-9-3** Developing a mandibular movement recording device using a PSD with a built-in signal managing circuit

○Hiroshi Shiga<sup>1</sup>, Yoshinori Kobayashi<sup>1</sup>, Ichiro Arakawa<sup>1</sup>, Masaoki Yokoyama<sup>1</sup>,  
Kazue Mizuuchi<sup>1</sup>  
<sup>1</sup>Department of Partial and Complete Denture, School of Dentistry at Tokyo, The Nippon Dental University, Japan

**P-9-4** Chewing kinematics in TMJ with asymmetric condylar long-axis represented by dynamic stereometry of the joint space

○Asuka Kageyama<sup>1</sup>, Kohtarō Yashiro<sup>1</sup>, Naoko Shida<sup>1</sup>, Yuka Uchiyama<sup>2</sup>,  
Shumei Murakami<sup>2</sup>, Kenji Takada<sup>1</sup>  
<sup>1</sup>Department of Orthodontics and Dentofacial Orthopedics, Graduate School of Dentistry Osaka University, <sup>2</sup>Department of Oral Radiology, Graduate School of Dentistry Osaka University, Japan

- P-9-5** Characteristics of mandibular movements in patients with square mandible
- Shinya Hirai<sup>1</sup>, Takumi Ogawa<sup>1</sup>, Yutaka Hosoda<sup>1</sup>, Yuko Shigeta<sup>1</sup>, Eriko Andou<sup>1</sup>,  
Rio Hirabayashi<sup>1</sup>, Tomoko Ikwa<sup>1</sup>, Shunji Fukushima<sup>1</sup>  
<sup>1</sup>Department of Fixed Prosthodontics, Tsurumi University School of Dental Medicine, Japan
- P-9-6** An analysis of chewing paths in Angle Class I malocclusion after orthodontic treatment
- Toshihiro Nakamura<sup>1</sup>, Yukitoshi Ohno<sup>1</sup>, Izumi Inaba<sup>2</sup>, Ai Ishiseki<sup>1</sup>,  
Wataru Tsuchimochi<sup>1</sup>  
<sup>1</sup>Department of Orthodontics, School of Dentistry at Tokyo, The Nippon Dental University, <sup>2</sup>Department of Orthodontics & Pediatric Dentistry, The Nippon Dental University Hospital, Japan
- P-9-7** Evaluation for chewing rhythm in skeletal Class 3 patients before and after surgical-orthodontic treatment
- Jin Itabashi<sup>1</sup>, Yayoi Shirai<sup>2</sup>, Masakuni Hirose<sup>1</sup>, Seiichirou Ishihara<sup>1</sup>, Michio Shimakura<sup>2</sup>,  
Toshihiko Himuro<sup>1</sup>  
<sup>1</sup>Department of Oral Growth and Development, School of Dentistry, Ohu University, <sup>2</sup>First Department of Prosthetic Dentistry, School of Dentistry, Ohu University, Japan

**P-10 Mandibular Movement/Occlusion 9 : 45~10 : 30 Chairperson : H. Inoue**

- P-10-1** The masticatory movements influenced by unilateral posterior crossbite
- Akito Tsuboi<sup>1</sup>, Kyoko Takatsu-Funayama<sup>1</sup>, Makoto Watanabe<sup>1</sup>  
<sup>1</sup>Division of Ageing and Geriatric Dentistry, Tohoku University Graduate School of Dentistry, Japan
- P-10-2** Effect of human brain activity by experimental occlusal interference
- Eri Makihara<sup>1</sup>, Shin-ichi Masumi<sup>1</sup>, Tatsuro Tanaka<sup>2</sup>, Yasuhiro Morimoto<sup>2</sup>,  
Ken-ichi Yoshino<sup>3</sup>, Masahiro Arita<sup>1</sup>, Toshihiro Kawano<sup>1</sup>, Shuichiro Howashi<sup>1</sup>,  
Yohei Hirowatari<sup>1</sup>, Mayumi Yagi<sup>1</sup>  
<sup>1</sup>Division of Occlusion & Maxillofacial Reconstruction, Kyushu Dental College, <sup>2</sup>Division of Diagnostic Radiology, Kyushu Dental College, <sup>3</sup>Division of Oral Neuroscience, Kyushu Dental College, Japan
- P-10-3** Influence of clenching during stress on mental sweating and skin blood flow
- Akinori Tasaka<sup>1</sup>, Yasuaki Tahara<sup>1</sup>, Tetsuya Sugiyama<sup>1</sup>, Kaoru Sakurai<sup>1</sup>  
<sup>1</sup>Department of Removable Prosthodontics and Gerodontology, Tokyo Dental College, Japan

**P-10-4** A study on the interdental thickness discrimination ability of the elderly

○Akito Yamada<sup>1</sup>, Yoshihiro Tsukiyama<sup>1</sup>, Natsuki Okushi<sup>1</sup>, Kiyoshi Koyano<sup>1</sup>

<sup>1</sup>Department of Removable Prosthodontics, Faculty of Dental Science, Kyushu University, Japan

**P-10-5** Postural effect on bite force and load distributions, influence of cross-legged in Caucasians

○Setsuhiro Hara<sup>1</sup>, Yoshitsugu Marumo<sup>1,2</sup>, Mayumi Miyazawa<sup>1</sup>, Munehiro Hayashi<sup>1</sup>,  
Yoshiki Ishigaki<sup>1</sup>, Toshiyuki Sakai<sup>1</sup>, Chisato Ishikawa<sup>1</sup>

<sup>1</sup>Division of TMD Clinic, The Nippon Dental University Hospital, <sup>2</sup>The Nippon Dental University College, Japan

**P-10-6** The effect of taste of food on brain wave

○Yoshinori Kobayashi<sup>1</sup>, Kazue Mizuuchi<sup>1</sup>, Hiroshi Shiga<sup>1</sup>, Ichiro Arakawa<sup>1</sup>,  
Masaaki Yokoyama<sup>1</sup>, Kuniyoshi Nakajima<sup>1</sup>

<sup>1</sup>Department of Partial and Complete Denture, School of Dentistry at Tokyo, The Nippon Dental University, Japan

**P-11 Treatment 1**

**9 : 00~9 : 45**

**Chairperson : N. Taguchi**

**P-11-1** Clinical study of the efficacy of the drug therapy on temporomandibular disorder (TMD)

○Kenji Fujisawa<sup>1</sup>, Mayumi Ohta<sup>1</sup>, Yukihiro Momota<sup>1</sup>, Hiroaki Nakanishi<sup>1</sup>,  
Masaru Nagayama<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan

**P-11-2** Effect of NSAIDs on temporomandibular joint disorders

○Yuki Hattori<sup>1,3</sup>, Kenichi Kurita<sup>1,3</sup>, Katsuhito Nakashima<sup>1,3</sup>, Norihiro Kondo<sup>1,3</sup>,  
Mikio Shimizu<sup>1,3</sup>, Tetsuya Yajima<sup>1,3</sup>, Hiromitsu Nabeshima<sup>1,3</sup>, Hiroaki Matsuura<sup>1,3</sup>,  
Makoto Takaishi<sup>1,3</sup>, Norio Kuroyanagi<sup>2,3</sup>, Junichiro Machida<sup>2,3</sup>, Nobumi Ogi<sup>2,3</sup>

<sup>1</sup>The First Department of Oral and Maxillofacial Surgery, Aichi-Gakuin University, School of Dentistry,  
<sup>2</sup>The Second Department of Oral and Maxillofacial Surgery, Aichi-Gakuin University, School of Dentistry,  
<sup>3</sup>TMD Clinic of Aichi-Gakuin University Hospital, Japan

**P-11-3** Improvement of facial esthetics and function following non-invasive TMJ reconstruction in patients with anterior disk displacement

○Tatsuyuki Shibusawa<sup>1</sup>, Mayuko Nakayama<sup>1</sup>, Koutaro Maki<sup>1</sup>

<sup>1</sup>Department of Orthodontics, School of Dentistry, Showa University, Japan

**P-11-4** A case of the intermaxillary traction for bilateral idiopathic condylar resorption

○Mikio Shimizu<sup>1,4</sup>, Hiroaki Matsuura<sup>1,4</sup>, Katsuhito Nakashima<sup>1,4</sup>, Norihiro Kondho<sup>1,4</sup>,  
Yuuki Hattori<sup>1,4</sup>, Tetsuya Yajima<sup>1,4</sup>, Hiromitsu Nabeshima<sup>1,4</sup>, Kenichi Kurita<sup>1,4</sup>,  
Ken Miyazawa<sup>2</sup>, Ikuko Nakasuji<sup>2</sup>, Shigemi Goto<sup>2</sup>, Masahiro Izumi<sup>3,4</sup>

<sup>1</sup>1st Department of Oral & Maxillofacial Surgery, School of Dentistry, Aichi-Gakuin University, <sup>2</sup>Department of Orthodontics, School of Dentistry, Aichi-Gakuin University, <sup>3</sup>Department of Radiology, School of Dentistry, Aichi-Gakuin University, <sup>4</sup>Department of Aichi-Gakuin Hospital, TMJ Clinic, Japan

**P-11-5** Case report of ultrasonically treated anterior open bite

○Yorika Kodaira<sup>1</sup>, Takahiro Arai<sup>1</sup>, Ichiro Takagi<sup>1</sup>, Takayuki Ueda<sup>1</sup>, Kaoru Sakurai<sup>1</sup>

<sup>1</sup>Department of Removable Prosthodontics and Gerodontology, Tokyo Dental College, Japan

**P-11-6** A case of temporomandibular joint rheumatoid arthritis with open bite treated by exercise of mouth opening and orthodontic treatment

○Noriko Hatano<sup>1</sup>, Hisako Hikiji<sup>1</sup>, Yuji Ogihara<sup>1</sup>, Tetsuya Yoda<sup>2</sup>, Tsuyoshi Takato<sup>1</sup>

<sup>1</sup>Department of Oral-Maxillofacial Surgery, Dentistry and Orthodontics, The University of Tokyo, <sup>2</sup>Department of Oral and Maxillofacial Surgery, The Saitama Medical School, Japan

**P-12 Treatment 2**

**9 : 45~10 : 30**

**Chairperson : T. Kawakami**

**P-12-1** Relation of clinical signs and symptoms to quality-of-life disturbance in patients with nonreducing disc displacement treated by pumping of the temporomandibular joint

○Shuichi Sato<sup>1</sup>, Hiroshi Kawamura<sup>1</sup>

<sup>1</sup>Division of Maxillofacial Surgery, Tohoku University Graduate School of Dentistry, Japan

**P-12-2** Reiterative unlock exercise on closed lock of the temporomandibular joint  
—A clinical observation—

○Masayuki Takahashi<sup>1</sup>, Yasunori Sato<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, National Defense Medical College, Japan

**P-12-3** Outcome differences between lysis and lavage of arthroscopy and open surgical disc repositioning of the TMJ

○Kan Yoshida<sup>1</sup>, Shigeyuki Takatsuka<sup>1</sup>, Koichiro Ueki<sup>1</sup>, Akira Tanaka<sup>1</sup>,  
Kiyomasa Nakagawa<sup>1</sup>, Etsuhide Yamamoto<sup>1</sup>, Masayoshi Narinobou<sup>2</sup>

<sup>1</sup>Oral and Maxillofacial Surgery, Graduate School of Medicine, Kanazawa University, <sup>2</sup>Oral and Maxillofacial Surgery, Noto General Hospital, Japan

- P-12-4** Surgical outcomes of patients of contracture of TMJ
- Koichi Asada<sup>1</sup>, Nagataka Toyoda<sup>1</sup>, Hideo Yamamoto<sup>1</sup>, Sinnzi Ide<sup>1</sup>, Katsunori Ishibashi<sup>1</sup>  
<sup>1</sup>Second Department of OMF Surgery, Tsurumi University, School of Dental Medicine, Japan
- P-12-5** A case of recurrent dislocation of temporomandibular joint in a preschool child
- Yoshiaki Ono<sup>1</sup>, Naoto Yano<sup>1</sup>, Keiko Taneda<sup>1</sup>, Tomoko Kawamura<sup>1</sup>,  
 Yoshiaki Hashimoto<sup>1</sup>, Yuzo Takagi<sup>1</sup>  
<sup>1</sup>Department of Pediatric Dentistry, Graduate School, Tokyo Medical and Dental University, Japan
- P-12-6** Abnormalities in the position of the mandibular bone, in which congenital dislocation of the temporomandibular joint was suspected
- Tadashi Morishita<sup>1</sup>  
<sup>1</sup>Department of Orthodontics, St. Mary's Hospital, Japan
- P-12-7** Ultrastructural study on adhesions in internal derangement of the temporomandibular joint
- Hisashi Hattori<sup>1</sup>, Kazuki Yasue<sup>1</sup>, Hideharu Hibi<sup>1</sup>, Shigeki Nakata<sup>1</sup>, Yasuaki Endoh<sup>1</sup>,  
 Yasuhisa Mieno<sup>1</sup>, Nozomi Taguchi<sup>1</sup>, Hideki Mizutani<sup>2</sup>, Minoru Ueda<sup>1</sup>  
<sup>1</sup>Department of Oral and Maxillofacial Surgery, Nagoya University Graduate School of Medicine, <sup>2</sup>Department of Oral and Maxillofacial Surgery, Fujita Health University School of Medicine, Japan

**P-13 Case Report 1**

**9 : 00~9 : 45**

**Chairperson : N. Inoue**

- P-13-1** Application of the titanium screw for surefire coronoidotomy
- Hiroaki Yoshida<sup>1</sup>, Jun Sako<sup>1</sup>, Ryosuke Yoshikada<sup>1</sup>, Akihiro Inoue<sup>1</sup>, Koji Yamada<sup>1</sup>,  
 Shosuke Morita<sup>1</sup>  
<sup>1</sup>First Department of Oral and Maxillofacial Surgery, Osaka Dental University, Japan
- P-13-2** A case of bilateral coronoid process hyperplasia treated by coronoidectomy before adolescent growth
- Tomoo Kaneko<sup>1</sup>, Nobuo Inoue<sup>2</sup>, Shinya Yura<sup>3</sup>, Junichiro Iida<sup>1</sup>  
<sup>1</sup>Department of Orthodontics, Graduate School of Dental Medicine, Hokkaido University, <sup>2</sup>Department of Gerodontology, Graduate School of Dental Medicine, Hokkaido University, <sup>3</sup>Tonami General Hospital, Japan

**P-13-3** Long-term results following the surgical treatment of hyperplasia of the tendon of the masticatory muscles and aponeurosis

○Tetsuya Yoda<sup>1</sup>, Takahiro Abe<sup>1</sup>, Kenichiro Imai<sup>1</sup>, Shigekazu Taguchi<sup>1</sup>,  
Akio Kobayashi<sup>1</sup>, Ichiro Sakamoto<sup>1</sup>, Fumihiko Tsushima<sup>2</sup>, Hideki Imai<sup>2</sup>,  
Noriko Hatano<sup>3</sup>, Hisako Hikiji<sup>3</sup>, Tsuyoshi Takato<sup>3</sup>, Yoshimasa Ishii<sup>4</sup>

<sup>1</sup>Oral and Maxillofacial Surgery, Saitama Medical University, <sup>2</sup>Oral and Maxillofacial Surgery, Tokyo Medical and Dental University, <sup>3</sup>Oral and Maxillofacial Surgery University of Tokyo, <sup>4</sup>Oral Surgery, Ebina General Hospital, Japan

**P-13-4** Fractures of condylar and coronoid process of the mandible : A case report

○Shinya Yura<sup>1</sup>, Noritaka Ohga<sup>1</sup>, Kazuhiro Ooi<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, Tonami General Hospital, Japan.

**P-13-5** A case of severe facial asymmetry with unilateral ankylosis of TMJ caused by osteomyelitis —Treatment with gap arthroplasty and distraction osteogenesis of the mandible—

○Eiji Fukuyama<sup>1</sup>, Katsuyuki Torikai<sup>2</sup>, Susumu Omura<sup>3</sup>, Kunimichi Soma<sup>1</sup>

<sup>1</sup>Orthodontic Science, Graduate School, Tokyo Medical and Dental University, <sup>2</sup>Plastic Surgery, Yokohama City University School of Medicine, <sup>3</sup>Oral and Maxillofacial Surgery, Yokohama City University Medical Center, Japan

**P-13-6** Temporomandibular joint ankylosis following craniotomy : A case report

○Maho Yoshida<sup>1</sup>, Yusaku Suehiro<sup>1</sup>, Koichi Takamori<sup>1</sup>, Kaori Igawa<sup>1</sup>, Koji Kashima<sup>1</sup>,  
Hideo Kurokawa<sup>1</sup>, Sumio Sakoda<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, Miyazaki Medical College, University of Miyazaki, Japan

**P-13-7** A case of pseudogout of the temporomandibular joint

○Tomohiko Kanasaki<sup>1</sup>, Ken Matsumoto<sup>1</sup>, Yukako Atsumi<sup>2</sup>, Yumiko Kodama<sup>3</sup>,  
Akiko Matsumoto<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery 2, Osaka University Graduate School of Dentistry, <sup>2</sup>Department of Dentistry and Oral Surgery, Higashiosaka General Hospital, <sup>3</sup>Department of Interdisciplinary Dentistry, Osaka University Graduate School of Dentistry, Japan

- P-14-1 Differential diagnosis between temporomandibular muscle disorder and tension-type headache.
- Masakazu Okubo<sup>1</sup>, Toshihiko Matsumoto<sup>1</sup>  
<sup>1</sup>Department of Stomatognathic Science and Occlusion, Nihon University School of Dentistry at Matsudo, Japan
- P-14-2 Two cases of masticator space abscess diagnosed at first as temporomandibular joint disorder
- Takumi Hasegawa<sup>1</sup>, Yasuyuki Shibuya<sup>1</sup>, Junichiro Takeuchi<sup>1</sup>, Noriko Ikehata<sup>1</sup>, Tsuyoshi Fujita<sup>1</sup>, Masaya Akashi<sup>1</sup>, Takahide Komori<sup>1</sup>  
<sup>1</sup>Department of Oral and Maxillofacial Surgery, Kobe University Graduate School of Medicine, Japan
- P-14-3 A difficulty in diagnosis when both postextraction infection and closed lock occurred
- Chiyuki Komiya<sup>1</sup>, Kenji Fukada<sup>1</sup>, Ryo Sasaki<sup>1</sup>, Toshihiro Okamoto<sup>1</sup>, Takaho Kuwazawa<sup>1</sup>, Hideki Ogiuchi<sup>1</sup>  
<sup>1</sup>Department of Oral and Maxillofacial Surgery, School of Medicine, Tokyo Womens Medical University, Japan
- P-14-4 Arthroscopic diagnosis and treatment of synovial chondromatosis of the temporomandibular joint : Case report and review of the literature
- Akie Takenaka<sup>1</sup>, Hirohito Fujita<sup>1</sup>, Shuji Matsuda<sup>2</sup>, Yasuro Yoshimura<sup>1</sup>  
<sup>1</sup>Department of Oral and Maxillofacial Surgery, Shimane University School of Medicine, <sup>2</sup>Matsuda Dental Clinic, Japan
- P-14-5 Pathogenesis of synovial osteochondromatosis of the TMJ
- Satoshi Maruyama<sup>1</sup>, Jun Cheng<sup>1</sup>, Sukalyan Kundu<sup>1,2</sup>, Al-Eryani Kamal<sup>1,3</sup>, Alvarado Galvez Carlos<sup>1,4,5</sup>, Ritsuo Takagi<sup>5</sup>  
<sup>1</sup>Division of Oral Pathology, Niigata University, Japan, <sup>2</sup>Jahangirnagar University, Bangladesh, <sup>3</sup>Sana'a University, Yemen, <sup>4</sup>University of Panama, Panama, <sup>5</sup>Oral and Maxillofacial Surgery, Niigata University, Japan

P-15-1 Positional relationship of the temporomandibular joint disk and condyle in relation to the glenoid fossa on MRI

○Hyewon Kim<sup>1</sup>, SJ Lee<sup>1</sup>, TW Kim<sup>1</sup>

<sup>1</sup>Department of Orthodontics, Graduate School, Seoul National University, Korea

P-15-2 Comparison between clinical diagnosis and MRI findings in 90 patients with temporomandibular joint disorder

○Sung-Soo Shin<sup>1</sup>, Hyung Wook Kim<sup>1</sup>, Se Hwan Cheon<sup>1</sup>, Yun Sub Um<sup>1</sup>, Jun Woo Park<sup>1</sup>

<sup>1</sup>Department of Oral & Maxillofacial Surgery, Department of Orthodontics, Kangdong Sacred Heart Hospital, College of Medicine, Hallym University, Korea

P-15-3 The relative signal intensity of retrodiscal tissue in TMJ using a T2-weighted MRI

○Sang Hwa Lee<sup>1</sup>, Hyun-Joong Yoon<sup>1</sup>, Mok-Kyun Choie<sup>1</sup>, Hoon Chung<sup>2</sup>,  
Young-Hee Park<sup>1</sup>

<sup>1</sup>Division of Oral and Maxillofacial Surgery Department of Dentistry St. Mary's Hospital The Catholic University of Korea, <sup>2</sup>Korean Society for Temporomandibular Joint Corporation, Korea

P-15-4 Ultra-fine diameter arthroscope for treatment of the habitual dislocation of the TMJ

○Tae-Sung Kim<sup>1</sup>, Yong-Min Jeon<sup>1</sup>, Hyung-Woo Oh<sup>1</sup>, Hoon Chung<sup>2</sup>, Jong-Jin Kwon<sup>1</sup>

<sup>1</sup>Department of Dentistry, College of Medicine, Korea University, <sup>2</sup>Korean Association for Temporomandibular Joint Corporation, Korea

P-15-5 Screening protocols and EMG evaluation of TMD

○Melita Valentic-Peruzovic<sup>1</sup>, Iva\_Z Alajbeg<sup>1</sup>, Davor Illes<sup>1</sup>, Mario Cifrek<sup>2</sup>, Ivica Pelivan<sup>1</sup>,  
Adnan Catovic<sup>1</sup>, Visnja Juros<sup>3</sup>, Zoran Kovac<sup>4</sup>

<sup>1</sup>Prosthetic Dentistry, School of Dental Medicine, University of Zagreb, <sup>2</sup>Electrical Engineering and Computing, University of Zagreb, <sup>3</sup>Audiology, Medical Center, <sup>4</sup>Dental Study, University of Rijeka, Croatia

- P-16-1 The application of the radiofrequency ablation in dentistry
- Byung-Ho Yang<sup>1</sup>, Yeon-Hee Lee<sup>2</sup>, Seong-Gon Kim<sup>3</sup>, Dong-Seok Nahm<sup>2</sup>  
<sup>1</sup>Department of Orthodontics, Sacred Heart Hospital, Hallym University, <sup>2</sup>Department of Orthodontics, College of Dentistry, Seoul National University, <sup>3</sup>Department of Oral and Maxillofacial Surgery Sacred Heart Hospital, Hallym University, Korea
- P-16-2 Surgical correction of coronoid process hyperplasia with coronoidectomy ; the case report
- Hyung-Woo Oh<sup>1</sup>, Yong-Min Jeon<sup>1</sup>, Tae-Sung Kim<sup>1</sup>, Hoon Chung<sup>2</sup>, Jong-Jin Kwon<sup>1</sup>  
<sup>1</sup>Department of Dentistry, College of Medicine, Korea University, <sup>2</sup>Korean Society for Temporomandibular Joint Corporation, Korea
- P-16-3 Functional and esthetic evaluation after maxillo-facial reconstruction using latissimus dorsi free flap and reconstruction plate with metal condyle
- Kang-Min Ahn<sup>1</sup>, Jong-Ho Lee<sup>2</sup>, Myung-Jin Kim<sup>2</sup>, Hoon Myoung<sup>2</sup>, Jin-Yong Lee<sup>2</sup>  
<sup>1</sup>ASAN Medical Center, Department of Oral and Maxillofacial Surgery, Medical School of Ulsan University, <sup>2</sup>Department of Oral & Maxillofacial Surgery, Graduate School of Dentistry, Seoul National University, Korea
- P-16-4 Management of hemifacial microsomia by distraction osteogenesis
- Su-Gwan Kim<sup>1</sup>  
<sup>1</sup>Department of Oral and Maxillofacial Surgery, College of Dentistry, Chosum University, Korea

**P-17-1** Dynamic compressive properties of the mandibular condylar cartilage

○Diego A. Dalla-Bona<sup>1</sup>, Eiji Tanaka<sup>1</sup>, Eizo Yamano<sup>1</sup>, Takashi Takata<sup>2</sup>, Kazuo Tanne<sup>1</sup>

<sup>1</sup>Department of Orthodontics and Craniofacial Developmental Biology, Hiroshima University Graduate School of Biomedical Sciences, <sup>2</sup>Department of Oral Maxillofacial Pathobiology, Hiroshima University Graduate School of Biomedical Sciences, Japan

**P-17-2** Histologic study on rabbit temporomandibular joint with mandibular lengthening

○Su-Gwan Kim<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, College of Dentistry, Chosun University, Korea

**P-17-3** Effect of estrogen on the expression of cytokines of the temporomandibular joint cartilage cells of the mouse

○Kyoung-In Yun<sup>1</sup>, Chul-Won Lee<sup>2</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, Eul-Ji University, <sup>2</sup>Department of Dentistry, Catholic University of Korea, Korea

**P-17-4** Preliminary study on the effect of inflamed TMJ synovial fluid on the intracellular calcium concentration and differential expression of iNOS and COX-2 in human immortalized chondrocyte C28/I2

○Dae-Il Son<sup>1</sup>, Bum-Su Kim<sup>1</sup>, Young-Kyun Kim<sup>1</sup>, Pil-Young Yun<sup>1</sup>, Dong-Geun Lee<sup>2</sup>

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**P-17-5** Association between estrogen receptor polymorphism with pain susceptibility in female TMJ osteoarthritis patients

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