P-1 Biochemistry/Synovial Fluid 9:00~9:45 Chairperson: S. Fujita

P-1-1 Multicenter study on the polymorphisms of the cytokines for TMJD
—A preliminary report—

○Kaoru Kanazawa¹, Takanori Shibata¹, Ritsuo Takagi², Kenji Kakudo³,
Hakubun Yonezu⁴, Koji Kino⁵, Yoshioki Hamamoto⁶, Eirou Kubota⁷
¹Health Sciences University of Hokkaido, School of Dentistry, ²Niigata University, ³Osaka Dental University,
⁴Tokyo Dental College, ⁵Tokyo Medical and Dental University, ⁶Yamagata University, ⁷Kanagawa
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 Wakita¹, Kenichi Kurita¹
¹The 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 Takano¹, Wataru Ariyoshi¹, Takahiro Kanno², Hisashi Ichimiya¹,
Takahiro Matayoshi¹, Tetsu Takahashi¹
¹Division of Oral and Maxillofacial Reconstructive Surgery, Kyushu Dental College, ²Department of Oral
and Maxillofacial Surgery, Kagawa Prefectural Central Hospital, Japan

P-1-4 The activation of NF-κB in synovial fibroblasts by microparticles released
from monocytes.

○Toshiaki Morisugi¹, Yasuharu Tanaka², Tetsuji Kawakami¹, Naoyuki Oheda¹,
Tadaaki Kirita¹
¹Department of Oral and Maxillofacial Surgery, Nara Medical University, ²Department of Biochemistry,
Nara Medical University, Japan

P-1-5 Regulated factors of NF-κB activity induced by uni-axial mechanical
stretch in lapine synovial fibroblasts

○Naoyuki Oheda¹, Toshiaki Morisugi¹, Yasuharu Tanaka², Tetsuji Kawakami¹,
Tadaaki Kirita¹
¹Department of Oral and Maxillofacial Surgery, Nara Medical University, ²Department of Biochemistry,
Nara Medical University, Japan
P-1-6  Mechanism of protection against IL-1β-induced cartilage degradation by pretreatment with TGF-β: Involvement of TIMPs and proMMP-3

○Katsuhiro Nakashima1, Kyoko Yamashita2, Kenichi Kurita1
1The First Department of Oral and Maxillofacial Surgery, School of Dentistry, Aichi-Gakuin University,
2Department 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 Fujita1, Toshiaki Morisugi2, Tetsuji Kawakami2, Tadaaki Kiriti2, Yasurou Yoshimura1
1Department of Oral and Maxillofacial Surgery, Shimane University Faculty of Medicine, 2Department 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 Nagai1, Akira Nakata1, Youichi Iwanami1, Masayuki Fukuda1, Youji Miyamoto1
1Division 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 Hattori1, Katsuhiko Kimoto1
1Department of Oral and Maxillofacial Rehabilitation, Prosthetics, Kanagawa Dental College, Japan

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

○Junichi Watahiki1, Tetsutaro Yamaguchi1, Tarou Irie2, Tetsuhiko Tachikawa2, Koutaro Maki1
1Department of Orthodontics, School of Dentistry, Showa University, 2Department of Oral Pathology, School of Dentistry, Showa University, Japan

P-2-4  Runx2 regulates mandibular condylar cartilage development

○Takako Shimizu1,2,3, Hitoshi Nagatsuka1, Hidetsugu Tsujigaw1, Takehiro Watanabe1,3, Norimasa Okafuji1, Noriyuki Nagai1, Toshiyuki Kawakami1,2
1Hard Tissue Pathology Unit, Matsumoto Dental University Graduate School of Oral Medicine, 2Hard Tissue Pathology Unit, Matsumoto Dental University Institute for Oral Science, 3Department of Orthodontics, Matsumoto Dental University School of Dentistry, 4Department 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 Kimura¹, Ken Miyazawa¹, Masako Tabuchi¹, Hatsuhiko Maeda², Yoichiro Kameyama², Shigemi Goto¹
¹Department of Orthodontics, School of Dentistry, Aichi-Gakuin University, ²Department 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 Kido¹, Hideki Ioi², Takayoshi Yamaza¹, Teruo Tanaka¹
¹Department of Oral anatomy and Cell Biology, Graduate School of Dental Science, Kyushu University, ²Department of Orthodontics, Graduate School of Dental Science, Kyushu University, Japan

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

○Hideki Ioi¹, Mizuho Kido², Takayoshi Yamaza², Shunsuke Nakata¹, Akihiko Nakasima¹, Teruo Tanaka²
¹Department of Orthodontics, Graduate School of Dental Science, Kyushu University, ²Department 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 Furuta¹, Masamori Harada¹, Akihiko Sakatoku¹, Toko Hayakawa¹, Chisako Inoue¹, Yohei Sugiuara¹, Seida Kamiya¹, Yoshihiko Sugita¹, Emiko Sato¹, Hatsuhiko Maeda¹, Yoichiro Kameyama¹
¹Department of Pathology, School of Dentistry, Aichi-Gakuin University, Japan

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

○Masamori Harada¹, Yohei Sugiuara¹, Hirohisa Furuta¹, Seida Kamiya¹, Akihiko Sakatoku¹, Kayoko Ohtsuki¹, Yoshihiko Sugita¹, Emiko Sato¹, Hatsuhiko Maeda¹, Yoichiro Kameyama¹
¹Department of Pathology, School of Dentistry, Aichi-Gakuin University, Japan

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

○Takashi Umebayashi¹, Shinsaku Morikawa¹, Masato Jinno¹, Tsuneharu Hayashi³, Mitsuhiro Takayama¹, Toshimi Kosaka¹, Nagisa Fukumura¹, Yoshihiko Sugita¹, Emiko Sato¹, Hatsuhiko Maeda¹, Yoichiro Kameyama¹
¹Department 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 Sugiru, Seidai Kamiya, Satoshi Takeuchi, Norio Yoshida, Nagisa Fukumura, Kayoko Ohatsuki, Yoshihiko Sugita, Emiko Sato, Hatsuhiro Maeda, Yoichiro Kameyama
1Department 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, Takashi Matsuura, Michituna Katafuchi, Kentaro Tokutomi, Takashi Tsuzuki, Masatsugu Ishikawa, Hironobu Sato
1Department 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, Kazuhiro Tominaga, Yuriko Hirota, Jinichi Fukuda
1Maxillofacial 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 1st report

Kazuo Abe, Jun-Ichi Ishimaru, Toshiyuki Shibata, Kenichi Kurita, Alastair N. Goss
1Department of Oral-Maxillofacial Surgery, Kouseiren Takaoka Hospital, 2Department of Oral-Maxillofacial Surgery, Gifu Prefectural Hospital, 3Department of Oral and Maxillofacial Surgery, Medical School, University of Gifu, 4First Department of Oral and Maxillofacial Surgery, School of Dentistry, Aichi-Gakuin University, Japan, 5Oral 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, Ryuta Kataoka, Ryoichi Furuya, Koji Kino, Yugo Abe, Tadaharu Kawawa
1Department of Prosthodontics, Showa University School of Dentistry, 2Department of Oral and Maxillofacial Surgery, Showa University School of Dentistry, 3Temporomandibular 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 Kijima1, Kazuya Honda2, Yosuke Kuroki1, Kunihito Matsumoto2, Jun Sakabe1, Motohiro Kikuchi1, Shoji Kawashima2, Ichiro Nakajima1

1Department of Pediatric Dentistry, School of Dentistry, Nihon University, 2Department 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 Sakurai1, Shoji Kohno1, Takafulmi Hayashi2, Hidemasa Nishiyama2, Ritsuo Takagi3, Kazuhiro Yamada4, Shuichi Nomura5, Yoshiaki Araì6, Kazuto Terada6, Hisashi Miyajima2, Kazumasa Kato6, Akiko Hosagai1, Hisao Ajima1, Naoko I1

1Division of Removable Prosthodontics, 2Division of Oral and Maxillofacial Radiology, 3Division of Oral and Maxillofacial Surgery, 4Division of Orthodontics, 5Division of Oral Health in Aging and Fixed Prosthodontics, 6Niigata University Graduate School of Medical and Dental Sciences, 7TMJ Clinic, Niigata University Medical and Dental Hospital, 8Department of Dentistry and Oral Surgery, Aizu Chuo Hospital, 9Institute of Oral Science, Matsumoto Dental University, Japan

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

○Hisahiro Takeuchi3, Masanori Nakano1, Eiichi Bando3, Maki Hosoki1, Keisuke Nishigawa1, Toyoko Satsuma1, Teruaki Ishikawa1

1Department 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 Matsumoto1, Teruaki Ishikawa2, Hisahiro Takeuchi2, Kenji Fujisawa3, Hidehiko Hosoki1, Masaru Hada5, Masanori Nakano2, Masaru Nagayama3

1Center for Special Dental Care, Tokushima University Medical and Dental Hospital, 2Department of Fixed Prosthodontics, 3Department of Oral and Maxillofacial Surgery, 4Department of Oral and Maxillofacial Radiology, 5Department 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 Yoshikawa1, Shigeru Kadowaki2, Kazuyuki Minowa3, Akemi Matsuda4, Nobuo Inoue2, Yasunori Totsuka3

1Oral and Maxillofacial Surgery, Department of Oral Patho-biological Science, Graduate School of Dental Medicine, Hokkaido University, 2Nikikai Dental Clinic, 3Clinic of Temporomandibular Disorders, Center for Advanced Oral Medicine, Hokkaido University, 4Oral and Maxillofacial Surgery, Sapporo Hospital of Hokkaido Railway Company, 5Geriatric Stomatology, Department of Oral Health Science, Graduate School of Dental Medicine, Hokkaido University, Japan
Clinico-statistical study of orthodontic patients with temporomandibular joint disorders

○Keiko Tsuji, Hidetaka Satake, Shinji Fujihara, Takashi Izawa, Shinya Horiuchi, Keiji Moriyama

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

Splenius muscle activities evoked by rat temporomandibular joint stimulation

○Masaki Kobayashi, Tadachika Yabushita, Kazuo Toda, Kunimichi Soma

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

An electrophysiological study on functional changes of rat temporomandibular joint mechanoreceptors induced by lateral shift of the mandible

○Satoshi Kokai, Tadachika Yabushita, Kazuo Toda, Kunimichi Soma

1Orthodontic Science, Tokyo Medical and Dental University, 2Integrative Sensory Physiology, Nagasaki University, Japan

Evaluation of the articular disc deformation volume during biting

○Eiji Hosoi, Tetuji Kawakami, Tomohiro Inoue, Hideto Ootuki, Tadaaki Kirita

1Department of Oral and Maxillofacial Surgery, Nara Medical University, Japan

Influence of clenching power on cerebral cortex blood flow

○Tomotaka Takeda, Mami Shibusawa, Kazunori Nakajima, Atsushi Shimada, Keiichi Ishigami

1Department of Sports Dentistry, Tokyo Dental College, Japan

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

○Koji Kashima, Maho Yoshida, Yosaku Suehiro, Kaori Igawa, Hideo Kurokawa, Sumio Sakoda

1Department of Oral and Maxillofacial Surgery, Miyazaki Medical College, Japan
P-5-6  Biomechanical analysis of three-dimensional models of anteroposteriorly shortened mandibular condyles

○Atsushi Murayama¹, Tsunehisa Shimoda², Kiwako Izumi³, Ryuji Uchida¹,
Shuhei Sumiyoshi¹, Tetsurou Ikebe¹, Satoru Ozeki³
¹Department of Oral and Maxillofacial Surgery, Fukuoka Dental College, ²Chuo 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 Miyamoto¹, Hisao Shigematsu¹, Seiji Suzuki¹, Hideaki Sakashita¹
¹Oral and Maxillofacial Surgery Unit 2, Department of Diagnostic & Therapeutic Sciences, Meikai University School of Dentistry, Japan

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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 Ota¹, Tadashi Nagashima¹, Takahiro Ono¹, Takashi Nokubi¹
¹Division of Oromaxillofacial Regeneration, Osaka University Graduate School of Dentistry, Japan

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

○Kazunori Nakajima¹, Tomotaka Takeda¹, Atsushi Shimada¹, Keiichi Ishigami¹
¹Department of Sports Dentistry, Tokyo Dental College, Japan

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

○Masanori Fujisawa¹, Yoshihisa Gohdo¹, Norimasa Tanabe¹, Kiyotaka Kanemura¹,
Kanji Ishibashi¹
¹Department of Fixed Prosthodontics, School of Dentistry, Iwate Medical University, Japan

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

○Osamu Komiyama¹, Misao Kawara¹
¹Department of Clinical Oral Physiology, School of Dentistry at Matsudo, Nihon University, Japan
P-7  Psychology/Diagnosis  9:00-9:45  Chairperson: H. Wake

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 Tamaki1, Hiroyuki Wake1, Tatsunori Ikeda1, Hideo Miyachi2, Hitoshi Miyaoka2
1Occlusion Clinic, Kanagawa Dental College Hospital, 2Department 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 Ikeda1, Katsushi Tamaki1, Hiroyuki Wake1, Hideo Miyachi2, Hitoshi Miyaoka2
1Occlusion Clinic, Kanagawa Dental College Hospital, 2Department 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 Sugiyama1, Kazuhiko Hashimoto1, Daïsuke Kobayashi1, Wataru Muraoka1, Hiroko Ikeda1, Aki Tagami1, Taneaki Nakagawa1, Koichi Wajima1
1Department of Dentistry of Oral Surgery, School of Medicine, Keio University, Japan

P-7-4  Food intake difficulty in patients with temporomandibular disorders

○Tadasu Haketa1, Koji Kino1, Masashi Sugisaki2, Noriyuki Narita3, Toshihisa Shibuya1, Takayuki Ishikawa1, Michiko Takaoka1, Fumiaki Sato4, Nahoko Yoshida2, Eri Kuruma2
1Temporomandibular Joint and Occlusion, Graduate School, Tokyo Medical and Dental University, 2Department of Dentistry, Jikei University School of Medicine, 3Department of Stomatognathic Science and Occlusion, Nihon University School of Dentistry at Matsudo, 4Maxillofacial Surgery, Graduate School, Tokyo Medical and Dental University, Japan

P-7-5  Version-up of miniature bruxism detection device and its clinical effectiveness.

○Hajime Minakuchi1, Chiyomi Nagamatsu1, Kenji Maekawa1, Manabu Kanyama1, Yoshizou Matsuoka1, Takuo Kuboki1
1Department 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 Nagamatsu1, Hajime Minakuchi1, Kenji Maekawa1, Manabu Kanyama1, Yoshizou Matsuoka1, Takuo Kuboki1
1Department 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 Takayanagi1, Shigeyuki Matsu1, Yuichiro Otsuka1, Satoru Kobayashi1, Hiromi Kaneko1, Yosuke Sakurai1, Hideharu Kanegae1
1Department 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 Thorne®) applied to temporomandibular joint lesions.

○Hakubun Yonezu1, Takahiko Shibahara1, Aya Yajima1, Mai Ohkubo2, Mika Yamamoto3, Takamichi Otonari3, Tsukasa Sano3
1Department of Oral & Maxillofacial Surgery, Tokyo Dental College, 2Department 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 Sakai1, Satoshi Adachi2, Masako Komatsu2,3, Hideharu Hibi1
1Sakai Orthodontic Office, 2Adachi Orthodontic Office, 3Komatsu Orthodontic Office, 4Department of Oral and Maxillofacial Surgery, School of Medicine, Nagoya University, Japan

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

○Naoya Kakimoto1, Tore A. Larheim2, Per-Lennart Westesson3, Shumei Murakami4, Souhei Furukawa5
1Department of Oral and Maxillofacial Radiology, Osaka University Graduate School of Dentistry, Japan, 2Department of Maxillofacial Radiology, Faculty of Dentistry, University of Oslo, Norway, 3Division 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 Ogura1, Shintaro Mori2, Masashi Sakayanagi3, Yuzo Fujita4, Masataka Kato5, Miya Kamada1, Yoshie Yamashita1, Mitsuaki Yamashiro1, Takashi Kaneda1
1Department 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 Morita1, Kentaroh Nakamura2, Munetoshi Takamura3, Kenji Morita1
1Forest Dental Clinic–Orthodontic Dentistry, 2Nakamura Dental Clinic, 3Medical Satellite Yaesu Clinic, Japan
P-8-6 Changes of magnetic resonance imaging of the temporomandibular joint before and after mandibular distraction osteogenesis

○Masayuki Fukuda¹, Youji Miyamoto¹, Akira Nakata¹, Hiroshi Takano¹, Hirokazu Nagai¹
  ¹Division 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 Toyama¹, Yoshihiko Sasaki¹, Makoto Tsuchimochi¹
  ¹Department 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 Ishikawa¹, Eiichi Bando¹, Masanori Nakano¹, Keisuke Nishigawa¹, Hisahiro Takeuchi¹, Maki Hosoki¹, Toyoko Satsuma¹
  ¹Department of Fixed Prosthodontics, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan

P-9-2 Accuracy and resolution of WinJaw® EPA (Electric Position Analyzer)

○Yojiro Atsumi¹, Yoshihiro Sugawara¹, Mototaka Goto¹, Miwa Shirono¹, Michio Toyama², Kazuhiro Nagata¹
  ¹TMD Clinic, The Nippon Dental University, Niigata Hospital, ²Radiology, 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 Shiga¹, Yoshinori Kobayashi¹, Ichiro Arakawa¹, Masaoki Yokoyama¹, Kazue Mizuuchi¹
  ¹Department 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 Kageyama¹, Kohtaro Yashiro¹, Naoko Shida¹, Yuka Uchiyama², Shumei Murakami², Kenji Takada¹
  ¹Department of Orthodontics and Dentofacial Orthopedics, Graduate School of Dentistry Osaka University, ²Department of Oral Radiology, Graduate School of Dentistry Osaka University, Japan
P-9-5 Characteristics of mandibular movements in patients with square mandible

○Shinya Hirai¹, Takumi Ogawa¹, Yutaka Hosoda¹, Yuko Shigeta¹, Eriko Andou¹, Rio Hiramayashi¹, Tomoko Ikawa¹, Shunji Fukushima¹
¹Department 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

○Toshio Nakamura¹, Yukitoshi Ohno¹, Izumi Inaba², Ai Ishiseki¹, Wataru Tsuchimochi²
¹Department of Orthodontics, School of Dentistry at Tokyo, The Nippon Dental University, ²Department 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 Itabashi¹, Yayoi Shirai², Masakuni Hirose¹, Seiichirou Ishihara¹, Michio Shimakura², Toshihiro Himuro¹
¹Department of Oral Growth and Development, School of Dentistry, Ohu University, ²First 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 Tsuboi¹, Kyoko Takatsu-Funayama¹, Makoto Watanabe¹
¹Division 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 Makihaı¹, Shin-ichi Masumi¹, Tatsuro Tanaka², Yasuhiro Morimoto², Ken-ichi Yoshino², Masahiro Arita¹, Toshihiro Kawano¹, Shuichiro Hoshishi¹, Yohei Hirowatari¹, Mayumi Yagi¹
¹Division of Occlusion & Maxillofacial Reconstruction, Kyushu Dental College, ²Division of Diagnostic Radiology, Kyushu Dental College, ³Division of Oral Neuroscience, Kyushu Dental College, Japan

P-10-3 Influence of clenching during stress on mental sweating and skin blood flow

○Akinori Tasaka¹, Yasuaki Tahara¹, Tetsuya Sugiyama¹, Kaoru Sakurai¹
¹Department of Removable Prosthodontics and Gerodontology, Tokyo Dental College, Japan
P-10-4  A study on the interdental thickness discrimination ability of the elderly

○Akito Yamada¹, Yoshihiro Tsukiyama¹, Natsuki Okushi¹, Kiyoshi Koyano¹
  ¹Department 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 Hara¹, Yoshitsugu Marumo¹,², Mayumi Miyazawa¹, Munehiro Hayashi¹,
  Yoshiki Ishigaki¹, Toshiyuki Sakai¹, Chisato Ishikawa¹
  ¹Division of TMD Clinic, The Nippon Dental University Hospital, ²The Nippon Dental University College, Japan

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

○Yoshinori Kobayashi¹, Kazue Mizuuchi¹, Hiroshi Shiga¹, Ichiro Arakawa¹,
  Masaoki Yokoyama¹, Kunihisa Nakajima¹
  ¹Department of Partial and Complete Denture, School of Dentistry at Tokyo, The Nippon Dental University, Japan

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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 Fujisawa¹, Mayumi Ohta¹, Yukihiro Momota¹, Hiroaki Nakanishi¹,
  Masaru Nagayama¹
  ¹Department 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 Hattori¹,²,³, Kenichi Kurita¹,²,³, Katsuhito Nakashima¹,²,³, Norihiro Kondo¹,²,³,
  Mikio Shimizu¹,²,³, Tetsuya Yajima¹,²,³, Hiromitsu Nabeshima¹,²,³, Hiroaki Matsuura¹,²,³,
  Makoto Takaishi¹,²,³, Norio Kuroyanagi²,³, Junichiro Machida²,³, Nobumi Ogì²,³
  ¹The First Department of Oral and Maxillofacial Surgery, Aichi-Gakuin University, School of Dentistry,
  ²The Second Department of Oral and Maxillofacial Surgery, Aichi-Gakuin University, School of Dentistry, ³TMD 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 Shibusawa¹, Mayuko Nakayama¹, Koutaro Maki¹
  ¹Department of Orthodontics, School of Dentistry, Showa University, Japan
P-11-4 A case of the intermaxillary traction for bilateral idiopathic condylar resorption

Mikio Shimizu1, Hiroaki Matsuura1, Katsuhito Nakashima1, Norihiro Kondho1,
Yuuki Hattori1, Tetsuya Yajima1, Hiromitsu Nabeshima1, Kenichi Kurita1,
Ken Miyazawa2, Ikuko Nakasuiji2, Shigemi Goto2, Masahiro Izumi3
1st Department of Oral & Maxillofacial Surgery, School of Dentistry, Aichi-Gakuin University, 2Department of Orthodontics, School of Dentistry, Aichi-Gakuin University, 3Department of Radiology, School of Dentistry, Aichi-Gakuin University, 4Department of Aichi-Gakuin Hospital, TMJ Clinic, Japan

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

Yorika Kodaira1, Takahiro Arai1, Ichiro Takagi1, Takayuki Ueda1, Kaoru Sakurai1
1Department of Removable Prosthodontics and Gerodontology, Tokyo Dental College, Japan

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

Noriko Hatano1, Hisako Hikiji1, Yuji Ogihara1, Tetsuya Yoda2, Tsuyoshi Takato1
1Department of Oral–Maxillofacial Surgery, Dentistry and Orthodontics, The University of Tokyo, 2Department 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 tempromandibular joint

Shuichi Sato1, Hiroshi Kawamura1
1Division of Maxillofacial Surgery, Tohoku University Graduate School of Dentistry, Japan

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

Masayuki Takahashi1, Yasunori Sato1
1Department 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 Yoshida1, Shigeyuki Takatsuka1, Koichiro Ueki1, Akira Tanaka1,
Kiyomasa Nakagawa1, Etsuhide Yamamoto1, Masayoshi Narinobou1
1Oral and Maxillofacial Surgery, Graduate School of Medicine, Kanazawa University, 2Oral and Maxillofacial Surgery, Noto General Hospital, Japan
P-12-4  Surgical outcomes of patients of contracture of TMJ

○ Koichi Asada¹, Nagataka Toyoda¹, Hideo Yamamoto¹, Sinnzi Ide¹, Katsunori Ishibashi¹
  ¹Second Department of OMF Surgery, Tsurumi University, Schhool of Dental Medicine, Japan

P-12-5  A case of recurrent dislocation of temporomandibular joint in a preschool child

○ Yoshiaki Ono¹, Naoto Yano¹, Keiko Taneda¹, Tomoko Kawamura¹, Yoshiaki Hashimoto¹, Yuzo Takagi¹
  ¹Department 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 Morishita¹
  ¹Department of Orthodontics, St. Mary’s Hospital, Japan

P-12-7  Ultrastructural study on adhesions in internal derangement of the temporomandibular joint

○ Hisashi Hattori¹, Kazuki Yasue¹, Hideharu Hibi¹, Shigeki Nakata¹, Yasuaki Endoh¹, Yasuhisa Mineno¹, Nozomi Taguchi¹, Hideki Mizutani¹, Minoru Ueda¹
  ¹Department of Oral and Maxillofacial Surgery, Nagoya University Graduate School of Medicine, ²Department 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 Yoshida¹, Jun Sak¹, Ryosuke Yoshikada¹, Akihiro Inoue¹, Koji Yamada¹, Shosuke Morita¹
  ¹First 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 Kaneko¹, Nobuo Inoue², Shinya Yura³, Junichiro Iida¹
  ¹Department of Orthodontics, Graduate School of Dental Medicine, Hokkaidou University, ²Department of Gerodontontology, Graduate School of Dental Medicine, Hokkaidou University, ³Tonami General Hospital, Hokkaidou, Japan
P-13-3 Long-term results following the surgical treatment of hyperplasia of the tendon of the masticatory muscles and aponeurosis

○Tetsuya Yoda¹, Takahiro Abe¹, Kenichiro Imai¹, Shigekazu Taguchi¹, Akio Kobayashi¹, Ichiro Sakamoto¹, Fumihiko Tsushima², Hideki Imai², Noriko Hatano², Hisako Hikiji³, Tsuyoshi Takato³, Yoshimasa Ishii⁴
¹Oral and Maxillofacial Surgery, Saitama Medical University, ²Oral and Maxillofacial Surgery, Tokyo Medical and Dental University, ³Oral and Maxillofacial Surgery University of Tokyo, ⁴Oral Surgery, Ebina General Hospital, Japan

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

○Shinya Yura¹, Noritaka Ohga¹, Kazuhiro Ooi¹
¹Department 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 Fukuyama¹, Katsuyuki Torikai², Susumu Omura³, Kunimichi Soma¹
¹Orthodontic Science, Graduate School, Tokyo Medical and Dental University, ²Plastic Surgery, Yokohama City University School of Medicine, ³Oral and Maxillofacial Surgery, Yokohama City University Medical Center, Japan

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

○Maho Yoshida¹, Yusaku Suehiro¹, Koichi Takamori¹, Kaori Igawa¹, Koji Kashima¹, Hideo Kurokawa¹, Sumio Sakoda¹
¹Department of Oral and Maxillofacial Surgery, Miyazaki Medical College, University of Miyazaki, Japan

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

○Tomohiko Kanesaki¹, Ken Matsumoto¹, Yukako Atsumi², Yumiko Kodama³, Akiko Matsumoto¹
¹Department of Oral and Maxillofacial Surgery 2, Osaka University Graduate School of Dentistry, ²Department of Dentistry and Oral Surgery, Higashiosaka General Hospital, ³Department of Interdisciplinary Dentistry, Osaka University Graduate School of Dentistry, Japan
P-14-1  Differential diagnosis between temporomandibular muscle disorder and tension-type headache.

○Masakazu Okubo¹, Toshihiko Matsumoto¹
  ¹Department 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 Hasegawa¹, Yasuyuki Shibuya¹, Junichiro Takeuchi¹, Noriko Ikehata¹, Tsuyoshi Fujita¹, Masaya Akashi¹, Takahide Komori¹
  ¹Department 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 Komiya¹, Kenji Fukada¹, Ryo Sasaki¹, Toshihiro Okamoto¹, Takahō Kuwazawa¹, Hideki Ogiuchi¹
  ¹Department 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 Takenaka¹, Hirohito Fujita¹, Shuji Matsuda², Yasuro Yoshimura¹
  ¹Department of Oral and Maxillofacial Surgery, Shimane University School of Medicine, ²Matsuda Dental Clinic, Japan

P-14-5  Pathogenesis of synovial osteochondromatosis of the TMJ

○Satoshi Maruyama¹, Jun Cheng¹, Sukalyan Kundu¹ ², Al-Eryani Kamal¹ ², Alvarado Galvez Carlos¹ ² ³, Ritsuo Takagi⁵
  ¹Division of Oral Pathology, Niigata University, Japan, ²Jahangirnagar University, Bangladesh, ³Sana’a University, Yemen, ⁴University of Panama, Panama, ⁵Oral 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 Kim¹, SJ Lee¹, TW Kim¹
¹Department 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 Shin¹, Hyung Wook Kim¹, Se Hwan Cheon¹, Yun Sub Um¹, Jun Woo Park¹
¹Department 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 Lee¹, Hyun-Joong Yoon¹, Mok-Kyun Choie¹, Hoon Chung², Young-Hee Park¹
¹Division of Oral and Maxillofacial Surgery Department of Dentistry St. Mary’s Hospital The Catholic University of Korea, ²Korean Society for Temporomandibular Joint Corporation, Korea

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

○Tae-Sung Kim¹, Yong-Min Jeon¹, Hyung-Woo Oh¹, Hoon Chung², Jong-Jin Kwon¹
¹Department of Dentistry, College of Medicine, Korea University, ²Korean Association for Temporomandibular Joint Corporation, Korea

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

○Melita Valentic-Peruzovic¹, Iva_Z Alajbeg¹, Davor Illes¹, Mario Cifrek², Ivica Pelivan¹, Adnan Catovic¹, Visnja Juroš³, Zoran Kovac⁴
¹Prosthetic Dentistry, School of Dental Medicine, University of Zagreb, ²Electrical Engineering and Computing, University of Zagreb, ³Audiology, Medical Center, ⁴Dental Study, University of Rijeka, Croatia
P-16-1 The application of the radiofrequency ablation in dentistry

○Byung-Ho Yang¹, Yeon-Hee Lee², Seong-Gon Kim³, Dong-Seok Nahm²
¹Department of Orthodontics, Sacred Heart Hospital, Hallym University, ²Department of Orthodontics, College of Dentistry, Seoul National University, ³Department 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 Oh¹, Yong-Min Jeon¹, Tae-Sung Kim¹, Hoon Chung², Jong-Jin Kwon¹
¹Department of Dentistry, College of Medicine, Korea University, ²Korean 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 Ahn¹, Jong-Ho Lee², Myung-Jin Kim², Hoon Myoung², Jin-Yong Lee²
¹ASAN Medical Center, Department of Oral and Maxillofacial Surgery, Medical School of Ulsan University, ²Department of Oral & Maxillofacial Surgery, Graduate School of Dentistry, Seoul National University, Korea

P-16-4 Management of hemifacial microsomia by distraction osteogenesis

○Su-Gwan Kim¹
¹Department 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-Bona¹, Eiji Tanaka¹, Eizo Yamano¹, Takashi Takata², Kazuo Tanne¹
¹Department of Orthodontics and Craniofacial Developmental Biology, Hiroshima University Graduate School of Biomedical Sciences, ²Department 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 Kim¹
¹Department 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 Yun¹, Chul-Won Lee²
¹Department of Oral and Maxillofacial Surgery, Eul-Ji University, ²Department 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-II Son¹, Bum-Su Kim¹, Young-Kyun Kim¹, Pil-Young Yun¹, Dong-Geun Lee²
¹Division of Oral and Maxillofacial Surgery, ²Division of Orthodontics, Department of Dentistry, Seoul National University Bundang Hospital, Korea

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

○Bum-Su Kim¹, Young-Kyun Kim¹, Seung-Chul Kang², Dong-Geun Lee³, Jong-Hoon Choi², Seong-Taek Kim², Hyung-Joon Ahn²
¹Division of Oral and Maxillofacial Surgery, Department of Dentistry, Seoul National University Bundang Hospital, ²TMJ and Orofacial Pain Clinic, Department of Oral Medicine, College of Dentistry, Yonsei University, ³Division of Orthodontics, Department of Dentistry, Seoul National University Bundang Hospital, Korea