

ANNUAL PUBLICATIONS

3rd Department of Conservative Dentistry (Dept. of Endodontics)

1993.1.-2000.3.

I. Staffs and Students (April, 1999)

Professor	Hideaki Suda	
Associate Professor	Chihiro Kobayashi	
Lecturer	Mitsuhiro Sunakawa	
Research Associate	Takashi Okiji	Atsushi Takeda
	Hideharu Ikeda	Arata Ebihara
	Nobuyuki Kawashima	Hiroyuki Matsumoto
	Norihiro Sawada	
Hospital Staff	Reiko Wadachi	Kazuo Sakurai
	Noriyuki Suzuki	Hiroki Kataoka
	Akemi Hikiji	Yasunari Matsui
	Hiromi Nakano	Daizo Nakayama
Clinical Training Staff	Osamu Arai	Yaeko Kinoshita
	Miki Kosaka	Rimi Shiraki
	Kayoko Tasaki	
Graduate Student	Lihua Kan	Somsinee Chaiyavej
	Masahiko Ozawa	Tomoatsu Kaneko
	Masamichi Goto	Asako Ohishi
	Gosei Yoshikawa	Haruki Ishikawa
	Tomoyasu Ishizuka	Masaaki Takashina
	Yuko Murashima	Weidong Niu
	Tomoo Anjo	Izumi Kikuchi
	Kentaro Shindo	Kana Numata
Special Student	Yudai Igarashi	Hideyo Sasaki
	Yuko Shoji	Katsunari Jinbo
	Kazuko Murakami	Miyako Yamamoto
	Ichin Yu	Aiko Uchida
	Atsushi Nakamura	Terue Honma
	Izumi Wakayama	Satsuki Ariga
	Daisuke Ikeda	Keiichiro Kobayashi
	Etsuko Nomura	Nao Maeda
Part-time Special Student	Keiji Murase	Toshihiro Ushikubo
Part-time Hospital Student	Chieko Okiji	Tomoko Takahashi
	Kasumi Murakoso	Keiko Fukuda
	Chinami Tajima	Yasue Fukumoto
Secretary	Yuki Nakashima	
Teaching Assistant	Masahiko Ozawa	Tomoatsu Kaneko
JSPS Research Fellow	Takatomo Yoshioka	
Inoue Science Research Fellow	Abu Mohammed Mostafa Kamal	

II. Educational Outline of Graduate Course

The aim of the course is to train graduate dental students so that they can act as the leading clinical scientists, researchers, or practitioners on worldwide bases. Since recent progress of the basic pulp biology and development of the endodontic technique are remarkable, the students are educated to acquire proper knowledge on modern endodontology and the related subjects, such as the pulp biology, neuroscience, bacteriology, immunology, material sciences etc., and to master the newest principles and technology of endodontics. All the students are requested to add new findings to the field of endodontics on their own original research works in the basic and/or clinical sciences. The graduates of this course are expected to popularize new principles and techniques on endodontics in order to renew dental practice, and they are further expected to have an ability of enlightening the general practitioners and the

other field specialists of dentistry with the new concepts of endodontics.

III. Research Subjects

1. Immunohistochemical Study on Pulpal and Periapical Diseases
2. Root Canal Preparation with Nickel-Titanium Files
3. Cytotoxic Evaluation of Root Canal Sealers and Dental Cements
4. Electrophysiological Study of Dentinal Pain
5. Application of Laser to Endodontics
6. Effect of Anaerobic Microorganisms in Root Canals using of Germ-free Animals
7. Quantitative Image Analysis in Dental Radiography
8. Dental Traumatology and Tooth Replantation
9. Evaluation of Ca(OH)₂ used as Intracanal Medicament
10. Dental Materials for Root Canal Filling
11. Microscopic Endodontics & Microscopic Endodontic Surgery
12. Bone Regeneration in Osseous Defects after Endodontic Surgical Treatment
13. Characterization of Pulp Cells

IV. Publications (January, 1993-March, 2000)

A. Original Articles

- 1) Kosaka T.: Early pulpal and periapical tissue reactions after pulp exposure -an immunohistochemical study-. Japanese Journal of Conservative Dentistry 36: 92-108, 1993 (in Japanese).
- 2) Ishii T.: Subcellular localization of systemically distributed formaldehyde. Japanese Journal of Conservative Dentistry 36: 131-146, 1993 (in Japanese).
- 3) Kobayashi C., Suda H.: A basic study on the electronic root canal length measurement part 4. a comparison of 6 apex locators. Japanese Journal of Conservative Dentistry 36: 185-192, 1993 (in Japanese).
- 4) Kobayashi C., Yoshioka T., Suda H.: Enlargement of constricted canals. Japanese Journal of Conservative Dentistry 36: 193-199, 1993 (in Japanese).
- 5) Kobayashi C.: Current electronic root canal length measurement. Japanese Journal of Clinical Endodontics 14: 42-52, 1993 (in Japanese).
- 6) Ueno K., Yoshihashi M., Sawada N., Nakajima M., Araki K., Suda H.: Cytotoxicity of anaerobic bacteria isolated from infected root canal. Journal of the Stomatological Society Japan 60: 408-415, 1993 (in Japanese).
- 7) Kawashima N., Okiji T., Kosaka T., Suda T.: Effects of cyclophosphamide on the development of experimentally-induced periapical lesions in the rat. Japanese Journal of Conservative Dentistry 36: 1388-1396, 1993 (in Japanese).
- 8) Araki K.: Undergraduate and postgraduate educational programs in Connecticut university, school of dentistry. The Journal of the Japanese Association for Dental Education 9:129-135, 1993(in Japanese).
- 9) Araki K.,Isaka H.,Ishii T.,Suda H.: Excretion of ¹⁴C-formaldehyde distributed systemically through root canal following pulpectomy. Endodontics and Dental Traumatology 9: 196-199, 1993.
- 10) Araki K.,Barbosa S.V.,Spångberg L.S.W.,Suda H.: Reduced cytotoxicity of a root canal sealer through eugenol substitution. J. Endodon. 19: 554-557, 1993.
- 11) Hattori M.,Shibata A.,Yoshioka K.,Sakaki Y.: Orphan peak analysis: a novel method for detection of point mutation using an automated fluorescence DNA sequencer. Genomics 15: 415-417, 1993.
- 12) Tanaka H.,Naruse S.,Seki K.,Onodera O.,Kobayashi H.,Miyatake T.,Shibata A.,Sasaki Y.,Kamino K.,Miki T.,Nukina N.,Imagawa M.,Nakano I.,Shimizu T.,Kojima T.,Hardy J.,Tsuji S.: Absence of linkage disequilibrium at amyloid precursor protein gene locus in Japanese familial Alzheimer's disease with ⁷¹⁷Val→ile mutation. Neuroscience Letters 162: 63-66. 1993.
- 13) Barbosa S.V.,Araki K.,Spångberg L.S.W.: Cytotoxicity of some modified root canal sealers and their leachable components. Oral Surg Oral Med Oral Pathol. 75: 357-361, 1993.
- 14) Kobayashi C., Suda H., Root canal preparation and apicalseats. Japanese Journal of Clinical Endodontics 14: 10-19, 1993 (in Japanese).
- 15) Okiji T.,Morita I.,Kawashima N.,Kosaka T.,Suda H.,Murota S.: Immunohistochemical detection of prostaglandin I₂ synthase in various calcified tissue-forming cells in rat. Archs Oral Biol. 38: 31-36, 1993.
- 16) Okiji T., Kawashima N., Kosaka T., Kobayashi C., Suda H.: Distribution of Ia antigen -expressing nonlymphoid cells in various stages of induced periapical lesions in rat molars. J.Endod. 20:27-31,1994.

- 17) Araki K., Suda H., Spångberg, L.S.W.: Indirect longitudinal cytotoxicity of root canal sealers on L929 cells and human periodontal ligament fibroblasts. *J.Endodon.* 20:67-70, 1994.
- 18) Isaka H.: Systemic distribution of formaldehyde after application of formocresol into cat canine root canals - detection of non-metabolized formaldehyde -. *Japan.J.Conserv.Dent.* 37:168-183, 1994(in Japanese).
- 19) Ueno K.: Periapical tissue responses in monoinfected gnotobiotic rats. *Japan.J.Conserv.Dent.* 37:184-204, 1994(in Japanese).
- 20) Kobayashi C., Suda H.: New electronic canal measuring device based on the ratio method. *J.Endodon.* 20:111-114, 1994.
- 21) Wright J.K., Barbosa S.V., Araki K., Spångberg L.S.W.: *In vitro* antimicrobial and cytotoxic Effects of Kri 1 paste and zinc oxide-eugenol used in primary tooth pulpectomies. *Pediatric Dentistry* 16:102-106, 1994.
- 22) Tokita Y., Yamamoto H., Matsumoto H., Ikeda H., Izawa T., Sunakawa M., Suda H.: Intradental nerve activities induced by application of two kinds of dental temporary cements in the cat. *Japan.J.Conserv.Dent.* 37:1008-1016, 1994(in Japanese).
- 23) Ebihara A., Ueno K., Nishioka M., Sekine Y., Takeda A., Nakajima M., Suda H.: Effect of Nd:YAG laser on infected dentin. *Japan.J.Conserv.Dent.* 37:1029-1036, 1994(in Japanese).
- 24) Yamamoto H., Suda H.: Postgraduate educational programs of the university of Kuopio in Finland. *J.Jap.Assoc.Dent.Educ.* 10:45-48, 1994(in Japanese).
- 25) Sunakawa M.: Postgraduate educational system in the faculty of dentistry, university of Toronto. *J.Jap.Assoc.Dent.Educ.* 10:80-87, 1994(in Japanese).
- 26) Suda H., Sunakawa M., Ikeda H., Yamamoto H.: Neurophysiological evaluation of intraligamentary anesthesia. *Dentistry in Japan* 31:46-50, 1994.
- 27) Tomura J., Kobayashi C., Suda H.: Long-term observation of the recurred periapical lesions. *J.Jpn.Endodon.Assoc.* 15:167-173, 1994(in Japanese).
- 28) Kobayashi C., Yoshioka T., Aramaki S., Yokoyama N., Suda H., Matoba K.: A basic study on the electronic root canal length measurement part 5. development of an ultrasonic canal preparation system with electronic canal length measurement. *J.Jpn.Endodon.Assoc.* 15:129-136, 1994(in Japanese).
- 29) Kobayashi C.: A basic study on the electronic root canal length measurement part 6. a basic evaluation of the sono-explorer MK II junior, Neosono MC, and Justy. *J.Jpn.Endodon.Assoc.* 15:137-143, 1994(in Japanese).
- 30) Närhi M., Yamamoto H., Ngassapa D., Hirvonen T.: The neurophysiological basis and the role of inflammatory reactions in dentine hypersensitivity. *Archs Oral Biol.* 39(Supplement):23-30, 1994.
- 31) Yamamoto H., Närhi M.: The function of nerve fibers innervating different parts of dentine. *Archs Oral Biol.* 39 (Supplement): 141-141, 1994
- 32) Ikeda H., Yoshioka T., Suda H.: Importance of clinical examination and diagnosis - a case of dens invaginatus -. *Oral Surg.* 79:88-91, 1995.
- 33) Kobayashi C.: Electronic canal length measurement. *Oral Surg. Oral Med. Oral Pathol. Oral Radiol. Endod.* 79:226-231, 1995.
- 34) Wadachi R., Suda H.: Ca(OH)₂ as root canal dressing agent. *J.Tokyo Dent.Assoc.* 43:71-76, 1995(in Japanese).
- 35) Tokita Y.: The effects of pulsed Nd:YAG laser irradiation on the dental pulp in the cat -a research into the intradental nerve activities, pulpal hemodynamics, and histopathological changes-. *Japan.J.Conserv.Dent.* 38:234-257, 1995(in Japanese).
- 36) Sekine Y.: Histopathological study of Er:YAG laser application to cavity preparation. *Japan.J.Conserv.Dent.* 38:211-233, 1995(in Japanese).
- 37) Yoshioka T., Ikeda H., Suda H.: The incidence of deep lingual pit and dens invaginatus occurring maxillary incisors and canines. *Japan.J.Conserv.Dent.* 38:453-458, 1995(in Japanese).
- 38) Sekine Y., Wadachi R., Ebihara A., Takeda A., Suda H.: Bacteriocidal effects of Nd:YAG laser irradiation in extracted bovine teeth. *J.Jap.Soc.Laser.Dent.* 6:31-39, 1995(in Japanese).
- 39) Tanaka N., Inai N., Baba K., Uchida K., Suda H.: Report of dental treatment for an island in Okinawa. *J.Stomato.Soc.* 62:325-330, 1995(in Japanese).
- 40) Itoh R., Sawada N., Araki K., Suda H.: Cytotoxic evaluation of dental cements using insert chamber method. *Japan.J.Conserv.Dent.* 38:1048-1056, 1995(in Japanese).
- 41) Yoshioka T., Hamasaki O., Nagao K., Kobayashi C., Suda H., Sasaki T.: Endodontic evaluation of direct digital intraoral radiography with dixel. *Japan.J.Conserv.Dent.* 38:902-907, 1995(in Japanese).
- 42) Okiji T., Sakurai K., Kamal A.M.M., Kosaka T., Kawashima N., Suda H.: Structural relationship between nerves and macrophages in experimentally-induced periapical inflammation in rat molars. *Japan.J.Conserv.Dent.* 38:938-946, 1995(in Japanese).
- 43) Yoshioka T., Nagao K., Kobayashi C., Suda H., Sasaki T.: Clinical evaluation of direct digital intraoral radiography with radiovisiography. *Dental Radiology.* 35:137-149, 1995(in Japanese).

- 44) Ikeda H., Sunakawa M., Suda H.: Three groups of afferent pulpal feline nerve fibres show different electrophysiological response properties. *Archs Oral Biol.* 40:895-904, 1995.
- 45) Kobayashi C., Yoshioka T., Suda H., Matoba K.: A study on the handpiece with electronic canal length measurement part 1. development of a handpiece. *J.Jpn.Endodon.Assoc.* 16:234-239, 1995(in Japanese).
- 46) Kobayashi C.: Clinical evaluation of modified K file. *J. Jpn. Endodon. Assoc.* 16:201-206, 1995(in Japanese).
- 47) Shibata A., Hattori M., Suda H., Sakaki Y.: Identification of *Cis*-acting elements involved in an alternative splicing of the amyloid precursor protein(*APP*) gene. *Gene.* 175:203-208, 1996.
- 48) Ebihara A., Tokita Y., Izawa T., Suda H.: Pulpal blood flow assessed by laser doppler flowmetry in a tooth with a horizontal root fracture. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 81:229-233, 1996.
- 49) Araki K., Suda H.: An analysis of clinical records of endodontic treatment by undergraduate students on Tokyo medical and dental university hospital. *The Journal of the Japanese Association for Dental Education.* 11:204-212, 1996(in Japanese).
- 50) Okiji T., Kosaka T., Kamal A.M.M., Kawashima N., Suda H.: Age-related changes in the immunoreactivity of the monocyte/macrophage system in rat molar pulp. *Archs Oral Biol.* 41:453-460, 1996.
- 51) Kawashima N., Okiji T., Kosaka T., Suda H.: Kinetics of macrophages and lymphoid cells during the development of experimentally induced periapical lesions in rat molars: A Quantitative Immunohistochemical Study. *J.Endodon.* 22:311-316, 1996.
- 52) Sekine Y., Wadachi R., Ebihara A., Takeda A., Suda H.: The effects of intracanal irradiation of pulsed Nd:YAG laser on the periradicular tissues in the dog. *J.Jap.Soc.Laser.Dent.* 7:12-21, 1996(in Japanese).
- 53) Kobayashi C., Yoshioka T., Suda H., Matoba K.: A study on the handpiece with electronic canal length measurement. part2. *J.Jpn.Endodon.Assoc.* 17:41-48, 1996(in Japanese).
- 54) Kobayashi C., Yoshioka T., Suda H.: A new ultrasonic canal preparation system with electronic monitoring of file tip position. *J.Endodon.* 22:489-492, 1996.
- 55) Araki K., Suda H.: Up-date of root canal medicament in endodontic treatment. *The Journal of the Japan Dental Association.* 49:100-108, 1996(in Japanese).
- 56) Sekine Y., Wadachi R., Ebihara A., Takeda A., Suda H.: Application of laser in the root canal for endodontic treatment. *J.Jap.Soc.Laser.Med.* 17:27-33, 1996(in Japanese).
- 57) Yoshino N., Hosokawa A., Sasaki T., Yoshioka T.: Interventional radiology for the non-surgical removal of sialoliths. *Dentomaxillofac. Radiol.* 25:242-246, 1996.
- 58) Yoshioka T., Kobayashi C., Suda H., Sasaki T.: Correction of backgroud noise in direct digital dental radiography. *Dentomaxillofac. Radiol.* 25:256-262, 1996.
- 59) Kobayashi C.: Development of a handpiece for mechanical root canal preparation using nickel-titanium files *J. Jpn. Endodon. Assoc.* 17:140-150, 1996(in Japanese).
- 60) Jontell M., Okiji T., Dahlgren U., Bergenholtz G.: Immune defense mechanisms of the dental pulp. *Critical Reviews in Oral Biology & Medicine* 9:179-200,1997.
- 61) Kino K., Sugisaki M., Ito H., Amagasa T., Tanabe H., Suda H., Suzuki N., Shiina N., Beppu S.: Multi-dimensional evaluation of pain in oral and maxillofacial diseases and examination of expression terms of pain using Japanese McGill pain questionnaire. *J. Jpn. Stomatol. Soc.* 46:444-456,1997. (in Japanese)
- 62) Kobayashi C.: The latest developments in the evolution of apex location devices. *Alpha Omegan* 90:34-40,1997. (in Japanese)
- 63) Ogawara M., Aoki K., Okiji T., Suda H.: Effect of ascorbic acid deficiency on primary and reparative dentinogenesis in non-ascorbate-synthesizing ODS Rats. *Archs Oral Biol.* 42:695-704,1997.
- 64) Okiji T., Jontell M., Belichenko P., Dahlgren U., Bergenholtz G., Dahlstrom A.: Structural and functional association between substance P- and calcitonin gene-related peptide-immunoreactive nerves and accessory cells in the rat dental pulp. *J.Dent.Res.* 76:1818-1824,1997.
- 65) Yoshioka T., Kobayashi C., Suda H., Sasaki T.: Quantitative subtraction with direct digital dental radiography. *Dentomaxillofac. Radiol.* 26:286-294,1997.
- 66) Kamal A.M.M., Okiji T., Kawashima N., Suda H.: Defense responses of Dentin/Pulp complex to experimentally-induced caries in rat molars: An immunohistochemical study on kinetics of pulpal Ia antigen-expressing cells and macrophages. *J.Endodon.* 23:115-120,1997.
- 67) Okiji T., Jontell M., Belichenko P., Bergenholtz G., Dahlstrom A.: Perivascular dendritic cells of the human dental pulp. *Acta Physiol.Scand.* 159:163-169,1997.
- 68) Wadachi R., Sekine Y., Ebihara A., Takeda A., Araki K., Suda H.: Histopathological evaluation of Ca(OH)₂ used as intracanal medicament for dog. *Japan.J.Conserv.Dent.* 40:23-31,1997.(in Japanese)

- 69) Araki K., Suda H.: Evaluation of endodontic simulation training of undergraduate students. J.Jap.Assoc.Dent.Educ. 12:169-176,1997. (in Japanese)
- 70) Ikeda H., Suda H.: Postgraduate dental education system in the United Kingdom -vocational training-. J.Jap.Assoc.Dent.Educ. 12:249-253,1997. (in Japanese)
- 71) Ikeda H., Suda H.: Postgraduate dental education system in the United Kingdom -British organization-. J.Jap.Assoc.Dent.Educ. 12:243-248,1997. (in Japanese)
- 72) Tomura J., Kobayashi C., Suda H.: A Story of apical calculus. J.Jpn.Endodon.Assoc. 18:52-56,1997. (in Japanese)
- 73) Kobayashi C.: An encouragement of exodontic therapy. J.Jpn.Endodon.Assoc. 18:6-11,1997. (in Japanese)
- 74) Kobayashi C.: Penetration of constricted canals with modified K files. J.Endodon. 23:391-393,1997.
- 75) Kobayashi C.: Problems about the clinical observation of the prognosis in endodontically treated teeth. J.Jpn.Endodon.Assoc. 18:80-81,1997. (in Japanese)
- 76) Ebihara A., Sekine Y., Takeda A., Suda H.: Application of Er:YAG laser to apicoectomy -a preliminary study-. J.Jpn.Soc.Laser Dent. 8:23-30,1997. (in Japanese)
- 77) Ikeda H., Tokita Y., Suda H.: Capsaicin sensitive A δ fibers in cat tooth pulp. J.Dent.Res. 73:1341-1349,1997.
- 78) Yamamoto H., Suda H.: The border Between pulpectomy and conservative treatment of pulp in relation to pain (1)The characteristics and examination of pain from the tooth. J.Jap.Dent.Assoc. 50:421-427,1997. (in Japanese)
- 79) Yamamoto H., Suda H.: The border Between pulpectomy and conservative treatment of pulp in relation to pain (2)Decisive factors to remove the pulp tissue from the tooth. J.Jap.Dent.Assoc. 50:523-529,1997. (in Japanese)
- 80) Ikeda H., Suda H.: Subjective sensation and objective neural discharges recorded from teeth with chronically inflamed pulp. J.Endodon. 23:1275-1279,1997.
- 81) Kobayashi C.: Root canal preparation with engine and Nickel-Titanium files Impressions Part(1). J.Jpn.Endodon.Assoc. 18:139-144,1997. (in Japanese)
- 82) Araki K., Suda H.: Follow-up study of academic performance in didactic instruction, simulation and clinical training of endodontics. Japanese Journal of Dental Education, 13:230:235,1998 (in Japanese).
- 83) Wadachi R., Araki K., Suda H.: Effect of calcium hydroxide on the dissolution of soft tissue on the root canal wall. J.Endodon. 24:326-330,1998.
- 84) Jontell M., Okiji T., Dahlgren U., Bergenholtz G.: Immune defense mechanisms of the dental pulp. Critical Reviews in Oral Biology and Medicine. 9:179-200,1998.
- 85) Ebihara A., Wadachi R., Sekine Y., Takeda A., Suda H.: Application of Er: YAG laser to retrograde cavity preparation. Journal of Japanese Society for Laser Dentistry 9:23-31, 1998 (in Japanese).
- 86) Ikeda H., Suda H.: Subjective sensation and objective neural discharges recorded from clinically nonvital and intact teeth. J.Endodon. 24:552-556,1998.
- 87) Nishioka M., Shiiya T., Ueno K., Suda H.: Tooth replantation in germ-free and conventional rats. Endod. Dent. Traumatol. 14:163-173, 1998.
- 88) Shiiya T.: Periapical tissue responses to *porphyromonas endodontalis* in monoinfected rats. Japan. J. Conserv. Dent. 41:808-820,1998. (in Japanese)
- 89) Rungvechvuttivittaya S., Okiji T., Suda H.: Responses of macrophage-associated antigen-expressing cells in the dental pulp of rat molars to experimental tooth replantation. Archs Oral Biol. 43:701-710,1998.
- 90) Ikeda H., Suda H.: Sensacion subjetiva y descargas nervisas objetivas registradas en dientes clinicamente no vitales intactos. Endodoncia 16:225-233,1998.
- 91) Yoshioka T., Kataoka H., Ebihara A., Kobayashi C., Suda H.: *In vitro* evaluation of continuous wave of obturation technique. The Journal of Japan Endodontic Association 19:150-158,1998 (in Japanese).
- 92) Kawashima N., Niederman R., Hynes R.O., Ullmann-Cullere M., Stashenko P.: Infection-stimulated infraosseus inflammation and bone destruction is increased in P-/E-selectin knockout mice. Immunology 97:117-123, 1999.
- 93) Kawashima N., Stashenko P.: Expression of bone-resorptive and regulatory cytokines in murine periapical inflammation. Archs Oral Biol. 44:55-66,1999.
- 94) Suzuki N., Okiji T., Suda H.: Enhanced expression of activation-associated molecules on macrophages of heterogeneous populations in expanding periapical lesions in rat molars. Archs Oral Biol. 44:67-79, 1999.
- 95) Kataoka H., Yoshioka T., Suda H., Imai Y.: Effect of sodium hypochlorite on adhesion of 4META/MMA-TBB resin to dentin. Japan. J. Conserv. Dent. 42:241-247,1999. (in Japanese)
- 96) Kawaguchi Y., Morio I., Suda H., Eto K.: Towards a more global approach in dentistry:educating international students. Dentistry in Japan 35:160-168,1999.

- 97) Sunakawa M., Chiang C.Y., Sessle B.J., Hu J.W.: Jaw electromyographic activity induced by the application of algescic chemicals to the rat tooth pulp. *Pain* 80:491-501,1999.
- 98) Tomura J., Nakano H., Kobayashi C.: The diagnosis and treatment for the obstinate periapical lesion: The clinical methods of pathological and biological test. *J. Jpn. Endodon. Assoc.* 20:22-31,1999 (in Japanese).
- 99) Sakurai K., Okiji T., Suda H.: Co-increase of nerve fibers and HLA-DR- and/or factor XIIIa-expressing dendritic cells in dentinal caries-affected regions of the human dental pulp : an immunohistochemical study. *J. Dent. Res.* 78:1596-1608, 1999.
- 100) Kawashima N., Hirano S., Morigami M., Yamaguchi Y., Murakami M., Uematsu H., Suda H., Tagami J.: Dental treatment and oral health care on Tokashiki island, Okinawa. *The Journal of the Stomatological Society, Japan* 66:331-338,1999 (in Japanese).
- 101) Sawada N., Yoshikawa G., Ishikawa H., Murashima Y., Suda H.: Frequency of accessory canals on the resected surface of human maxillary incisors using Methylene Blue staining under the microscope. *J. Jpn. Endodon. Assoc.* 20:84-86, 1999(in Japanese).
- 102) Hikiji A., Yamamoto H., Sunakawa M., Suda H.: Increased blood flow and nerve firing in the cat canine tooth in response to stimulation of the second premolar pulp. *Archs Oral Biol.* 45:53-61,2000
- 103) Suda H., Sunakawa M., Horiuchi H., Asai Y., Kohno S., Toda T., Inoue K., Kubo Y., Yoshida H., Masaka N., Nakakuki K.: A study of the dental treatment for patients with infectious diseases. *Journal of the Japanese Association for Dental Science* 19:64-74, 2000(in Japanese).
- 104) Suda H., Sunakawa M., Horiuchi H., Asai Y., Kohno S., Toda T., Inoue K., Kubo Y., Yoshida H., Masaka N., Nakakuki K.: A study of the dental treatment for patients with infectious diseases. *Dentistry in Japan* 36:179-179, 2000.

B. Books

- 1) Kobayashi C.:Which is the best root canal locator.In:Dental Outlook Extra/Dental materials and drugs from infection control to prothodontics, Ishiyaku Publishers,Inc.,Tokyo,82-88,1993 (in Japanese).
- 2) Suda H.:How to remove root canal filling.In: Dental Outlook Extra/Dental materials and drugs from infection control to prothodontics, Ishiyaku Publishers,Inc.,Tokyo,110-113,1993 (in Japanese).
- 3) Suda H.:What is the best filling material to keep pulp vitality.In: Dental Outlook Extra/Dental materials and drugs from infection control to prothodontics,Ishiyaku Publishers,Inc.,Tokyo,196-199,1993 (in Japanese).
- 4) Suda H.:Our life and oral health.In:Adult's disease and women disease,Koudansya,Tokyo,219-236,1999 (in Japanese).
- 5) Suda H.:Dentin permeability and tooth pain.In:Pathology of wound healing — Clinical aspect — Vol.1 Endodontics, Ishiyaku Publishers,Inc.,Tokyo,115-132,1993 (in Japanese)
- 6) Izawa T.,Suda H.:The usage of laser for endodontic treatment.In: Pathology of wound healing — Clinical aspect — Vol.1 Endodontics, Ishiyaku Publishers,Inc.,Tokyo,265-277,1993 (in Japanese).
- 7) Shimokawa K.,Suda H.: Dental care in Japanese The new guideline for endodontics.In:The collection of Eiichi Masuhara's dialogue about Japanese dental treatment,Quintessence,Tokyo,193-221,1994(in Japanese).
- 8) Shibata A.:Bio manual series 2 The method of making genetic library.In:Medical study,Youdosya, Tokyo,41-48,1994(in Japanese).
- 9) Kawashima N.,Suda H.:Informed consent about spontaneous or percussion pain after pulpectomy.In:Informed consent,Dental Diamond Co.,Tokyo,28-29,1994(in Japanese).
- 10) Hu J.W.,Yu X-M.,Sunakawa M.,Chiang C.Y.,Haas D.A.,Kwan C.H.,Tsai C.-M.,Vernon C.R.,Sessle B.J.:Electromyographic and trigeminal brainstem neuronal changes associated with inflammatory irritation of superficial and deep craniofacial tissues in rats.In:Proceedings of the 7th world congress on pain. Progress in pain research and management, Vol.2,IASP Press,Seattle,325-336,1994.
- 11) Kobayashi C.:Treatment of pulpal disease.In:Arrangement of current dental knowledge conservative dentistry. In:Endodontics 2nd ed. (Toda,T.,Matsumoto,K., editing),Ishiyaku Publishers,Inc.,Tokyo,72-88,1994 (in Japanese).
- 12) Araki K.:Checkpoint of Access cavity preparation.In:Checkpoint of clinical dental treatment,Dental Diamond Co.,Tokyo,22-25,1994 (in Japanese).
- 13) Araki K.:Determination of working root canal length.In:Checkpoint of clinical dental treatment,Dental Diamond Co.,Tokyo,26-29,1994 (in Japanese).
- 14) Araki K.:Checkpoint of root canal preparation.In:Checkpoint of clinical dental treatment,Dental Diamond Co.,Tokyo,30-35,1994 (in Japanese).
- 15) Araki K.:Case Selection of root canal therapy, Dental surgery or extraction. In:Checkpoint of clinical dental treatment,Dental Diamond Co.,Tokyo,16-22,1994 (in Japanese).
- 16) Araki K.:Diagnosis of dental pain.In:Checkpoint of clinical dental treatment,Dental Diamond Co.,Tokyo,12-15,1994 (in Japanese).

- Japanese).
- 17) Suda H., Sekine Y.: Effect of cavity preparation by Er:YAG laser to dental pulp. In: Dental Outlook Extra Issue / Clinical application on dental laser -Clinical basis-, Ishiyaku Publishers, Inc., Tokyo, 50-57, 1994 (in Japanese).
 - 18) Sekine Y., Ebihara A., Takeda A., Suda H.: Pulpal Reaction in dog following cavity preparation by Er:YAG laser. In: Proc. SPIE, Washington, 159-167, 1995.
 - 19) Sekine Y., Ebihara A., Takeda A., Suda H.: Erbium:YAG laser application to cavity preparation : Light microscopic investigation of the tooth pulp. In: Lasers in dentistry, Monduzzi Editore, Bologna, 167-172, 1995.
 - 20) Sunakawa M., Suda H., (Edita: Sasaki M.): Toothache and referred orofacial pain. In: Maxillofacial and oral surgery, Oral health association, Tokyo, 142-147, 1995 (in Japanese).
 - 21) Kobayashi C., (Edita: Masuhara, E.): Function and new endodontics in ultrasonic endodontic device, Solfy ZX. In: Advanced dental technology and new clinical application (Advanced dental approaches to new end), Ishiyaku Publishers, Inc., Tokyo, 226-230, 1995 (in Japanese).
 - 22) Bergenholtz G., Knutsson G., Jontell M., Okiji T.: Albumin flux across dentin of young human premolars following temporary exposure to the oral environment. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 51-57, 1996.
 - 23) Suda H., Sunakawa M., Yamamoto H.: Orofacial referred pain - its physiological basis and case report. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 79-84, 1996.
 - 24) Suda H., Sekine Y., Ebihara A., Takeda A.: The effects of intracanal irradiation of pulsed Nd:YAG laser on the periradicular tissues in the dog. In: 5th congress of the international society for lasers in dentistry, Monduzzi editore, Bologna, 119-124, 1996.
 - 25) Närhi M., Yamamoto H., Ngassapa D.: Function of intradental nociceptors in normal and inflamed teeth. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 136-140, 1996.
 - 26) Matthews B., Andrew D., Amess T.R., Ikeda H., Vongsavan N.: The functional properties of intradental nerves. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 146-153, 1996.
 - 27) Jontell M., Okiji T., Dahlgren U., Bergenholtz G.: Interaction between perivascular dendritic cells, neuropeptides and endothelial cells in the dental pulp. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 182-187, 1996.
 - 28) Sunakawa M., Yamamoto H., Tokita Y., Matsumoto H., Suda H.: Cervical spinal cord neuronal changes associated with dental pulp inflammation. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 251-253, 1996.
 - 29) Suzuki N., Kawashima N., Yamamoto H., Suda H.: The effects of inferior alveolar nerve denervation on pulpal and periapical defense mechanisms in rats. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 276-277, 1996.
 - 30) Yamamoto H., Närhi M., Ikola S., Hippi P.: Precipitation of oxalates in dog dentinal tubules *in vivo*. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 278-279, 1996.
 - 31) Okiji T., Bergenholtz G., Jontell M.: Phenotypic characteristics of class II molecule expressing cells in human dental pulp. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 313-315, 1996.
 - 32) Kawashima N., Okiji T., Ogawara M., Kamal A.M.M., Rungvechvuttivittaya S., Sakurai K., Suda H.: Dendritic cell-specific antigen-expressing cells in rat pulpal and periapical tissues. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 323-324, 1996.
 - 33) Ikeda H., Holley M., Matthews B.: Monoclonal antibodies to cat odontoblasts raised by *in vitro* immunization. In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 325-326, 1996.
 - 34) Matsumoto H., Sunakawa M., Suda H.: Do pulpal inflammatory changes modulate periodontal mechanoreceptive afferent Activities? In: Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex, Quintessence Publishing Co., Ltd., Tokyo, 327-328, 1996.
 - 35) Kamal A.M.M., Okiji T., Kawashima N., Kosaka T., Suda H.: Distribution of immunocompetent cells in experimental caries

- induced pulpitis.In:Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex,Quintessence Publishing Co., Ltd.,Tokyo,331-332,1996.
- 36) Tokita Y., Sunakawa M., Suda H.:The effects of pulsed Nd:YAG laser on the tooth pulp.In:Proceedings of the International Conference on Dentin/Pulp Complex 1995 and the International Meeting on Clinical Topics of Dentin/Pulp Complex,Quintessence Publishing Co., Ltd.,Tokyo,369-370,1996.
- 37) Ikeda H., Holley M., Matthews B.:Identification of odontoblasts with monoclonal antibodies raised by *in vitro* immunization. In: *In vitro* Immunization Technique ,Aurion,Amsterdam,195-216,1996.
- 38) Sunakawa M., Suda H.: Chapter 6, General dental treatment for the aged patients - conservative treatment.In:Manual of Dental Treatment for the Aged and Medically Compromised Patients,Ishiyaku Publishers, Inc.,183-187,1996 (in Japanese).
- 39) Sekine Y., Ebihara A., Takeda A., Suda H.The cavity preparation with Er:YAG laser.In:Dental Outlook Extra Issue, Dental Olympia '95 - Dentistry of the Next Century,Ishiyaku Publishers, Inc.,Tokyo,259,1996 (in Japanese).
- 40) Araki K., Wadachi R., Shiya T., Ueno K., Suda H.:Application of newly designed calcium hydroxide paste as root canal medicament.In:Dental Outlook Extra Issue, Dental Olympia '95 - Dentistry of the Next Century,Ishiyaku Publishers, Inc.,Tokyo,291,1996 (in Japanese).
- 41) Okiji T.:Class II MHC Molecule-expressing cells of the dental pulp. Phenotypic, structural and functional characterization of cellular components involved in pulpal immunodefence.In:Göteborg University (Thesis) , Göteborg,1996.
- 42) Shibata A.:Differential display method.In:cDNA Cloning,Youdosya,Tokyo,119-127,1996 (in Japanese).
- 43) Araki K.:A standard therapy for the diseases of pulpal and periapical tissue.In:Mannual of Clinical Training for Dental Practice,Ishiyaku Publishers, Inc.,Tokyo,98-125,1997 (in Japanese).
- 44) Suda H.:STEDMAN'S ENGLISH-JAPANESE MEDICAL, Medical View Co. Ltd.,Tokyo,1997 (in Japanese).
- 45) Ikeda H., Suda H.: I .Basic aspects, Chapter 3. Physiological aspects.In:Endodontic treatment of immature permanent teeth - Basic and clinical aspects-,Quintessence Publishing Co.,Tokyo,32-47,1997 (in Japanese).
- 46) Yoshino N., Yoshioka T.:The diagnostic imaging in tooth and periodontal disease.In:Dental Outlook Extra issue,Ishiyaku Publishers,Inc.,Tokyo,101-106,1997 (in Japanese).
- 47) Suda H.:The contemporary root canal treatment.In:New Caaliology and Operative Dentistry Clinical Prothodontics,Ishiyaku Publishers,Inc.,Tokyo,153-156,1997 (in Japanese).
- 48) Ebihara A., Suda H.:Introduction to diagnostic imaging.In:Dental Diamond Present and Future of Diagnostic Imaging,Dental Diamond Co.,Tokyo,11-12,1997 (in Japanese).
- 49) Yamamoto H., Suda H.:II Pain from tooth and periodontal ligament 1.Pulpitis.In:Clinical Practice of Oral and Maxillofacial Pain,Ishiyaku Publishers, Inc.Tokyo,184-192,1997 (in Japanese).
- 50) Suda H. Sawada N.:The Materials for endodontic treatment.In:The Side Effects and Safety of Dental Materials,Gakkenn syoin,Tokyo,105-120,1997 (in Japanese).
- 51) Okiji T., Suda H.:Oral and dental diseases.In:Strategies for anti-inflammatory treatment,Iyaku Journal Co.,Osaka,805-811,1997 (in Japanese).
- 52) Suda H.:Dental caries and pulpitis.In:Today's Therapy 1998, Vol. 40,Igaku-Shoin, Ltd.,Tokyo,867-868,1998 (in Japanese).
- 53) Suda H.:Endodontics 2nd Ed.,Ishiyaku Publishers, Inc.,Tokyo.1998.in Japanese.
- 54) Suda H.:Stedman's English-Japanese Medical Dictionary for Nurses,Medical View Co. Ltd.,Tokyo,1998 (in Japanese).
- 55) Suda H.:Stedman's English-Japanese Medical Dictionary -CD-ROM Ed.,Medical View Co. Ltd,Tokyo,1998 (in Japanese).
- 56) Suda H.:Biological endodontics.In:Dental Diamond Co.,Tokyo,52-61,1998 (in Japanese).
- 57) Sunakawa M., Matsui Y., Yamamoto H., Suda H.:Tooth pulp inflammation modulates inferior alveolar nerve-driven neuron's responsiveness.In:Neurobiology of Mastication -from Molecular to System Approach,Elsevier Science,Amsterdam,256-258,1999.
- 58) Ikeda H., Goto M., Sahara Y., Suda H., Nakamura,Y.:Whole-cell voltage-clamp recordings from feline odontoblasts. In: Neurobiology of Mastication -from Molecular to System Approach,Elsevier Science,Amsterdam,79-82,1999.
- 59) Matsui Y., Sunakawa M., Suda H.:Jaw muscle activities induced by tooth pulp stimulation change with aging.In:Neurobiology of Mastication -from Molecular to System Approach,Elsevier Science,Amsterdam,425-427,1999.
- 60) Araki K. Suda H.:Root canal obturation.In:Handy Endodontics,Gakken Syoin, Tokyo,P105-122,1999 (in Japanese).
- 61) Suda H.:The Periapical disease.In:Handy Endodontics,Gakken Syoin,Tokyo,78-104,1999 (in Japanese).
- 62) Suda H.: The Contemporary Root Canal Treatment.In:Clinical Periodontics, New Caliology and Operative Dentistry,Tomonari Pub.,Tokyo,153-156,1999.
- 63) Suda H.:Pulp conservation or Pulpectomy?.In:The Nippon Dental Review Separate Volume, 1999,Hyoron Publishers, Inc.,Tokyo,10-11,1999 (in Japanese).

- 64) Suda H.:The course and measures of the pain after pulpectomy.In:The Nippon Dental Review Separate Volume,1999,Hyoron Publishers, Inc.,Tokyo,12-13,1999 (in Japanese).
- 65) Suda H.:The decision of timing of root canal filling.In:The Nippon Dental Review Separate Volume, 1999,Hyoron Publishers, Inc.,Tokyo,14-15,1999 (in Japanese).
- 66) Suda H.:The criterion for retreatment.In:The Nippon Dental Review Separate Volume,1999,Hyoron Publishers, Inc.,Tokyo,16-17,1999 (in Japanese).
- 67) Suda H.:The endodontic treatment-Its efficiency and reliability.In:Dental Diamond Extra Issue Endodontic Treatment,Dental Diamond Co.,Tokyo,8-9,1999 (in Japanese).
- 68) Yoshioka T., Suda H.:Root canal filling technique with vertical compaction method.In:Dental Diamond Extra Issue Endodontic Treatment,Dental Diamond Co.,Tokyo,60-67,1999 (in Japanese).
- 69) Yoshioka T., Suda H.:How to use direct digital radiographic system in endodontics.In:Dental Diamond Extra Issue Endodontic Treatment,Dental Diamond Co.,Tokyo,162-165,1999 (in Japanese).
- 70) Suda H.:The preparation for endodontic treatment.In:Dental Diamond Extra Issue Endodontic Treatment,Dental Diamond Co.,Tokyo,12-17,1999 (in Japanese).
- 71) Izawa T., Chiyavej,S., Yoshioka T.:How to treat complicated cases. The method of the endodontic surgery.In:Dental Diamond Extra Issue Endodontic Treatment,Dental Diamond Co.,Tokyo,88-93,1999 (in Japanese).
- 72) Takeda A., Suda H.:The root canal preparation (access cavity preparation) ,In:Dental Diamond Extra Issue Endodontic Treatment,Dental Diamond Co.,Tokyo,26-33,1999 (in Japanese).
- 73) Sunakawa M.:Strip perforation and its repair.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,135-144,1999 (in Japanese).
- 74) Okiji T., Suda H.:The mechanism of pulpitis and periapical periodontitis.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,5-16,1999 (in Japanese).
- 75) Tomura J., Kobayashi C.:The microorganism outside apical foramen.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,118-127,1999 (in Japanese).
- 76) Sawada N.:The circumstance of American endodontic specialist.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,203-208,1999 (in Japanese).
- 77) Yamamoto H., Hikiji A.:Dentine hypersensitivity.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,51-64,1999 (in Japanese).
- 78) Wadachi R.:Root canal obturation with system B and obtura II.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.Tokyo,128-134,1999 (in Japanese).
- 79) Izawa T., Terauchi Y., Ozawa M., Tajima C.:Microendodontics.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,145-155,1999 (in Japanese).
- 80) Ebihara A.:How to use the laser for endodontic treatment.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,193-202,1999 (in Japanese).
- 81) Yoshioka T.:Endodontics and image diagnosis.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,65-74,1999 (in Japanese).
- 82) Kataoka H.:The Importance of root canal irrigation.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,94-101,1999 (in Japanese).
- 83) Kobayashi C.:The root canal preparation with Ni-Ti file.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,85-93,1999 (in Japanese).
- 84) Suda H.:Preface.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,1,1999 (in Japanese).
- 85) Suda H.:Endodontic treatment and pain control.In:Dental Outlook Extra Issue / The Recent Topics of Endodontics,Ishiyaku Publishers, Inc.,Tokyo,17-25,1999 (in Japanese).
- 86) Takeda A., Sekine Y., Suda H.:The pulpal irritation of laser.In:The contemporary Dental Laser Equipment,Dental Diamond Co.,Tokyo,P50-51,1999 (in Japanese).
- 87) Sunakawa M.:Pulpal pain and the neuronal plasticity of the central nervous system.In :The Scientific Diagnosis for Root Canal Treatment,The Quintessence Pub. Co. Ltd.,Tokyo,48-55,1999 (in Japanese).
- 88) Sawada N., Izawa T., Suda H.:Principles of microendodontics.: The Scientific Diagnosis for Root Canal Treatment, The Quintessence Pub. Co. Ltd., Tokyo,71-76,1999 (in Japanese).
- 89) Izawa T., Sawada N., Suda H.:Current topics in endodontic surgery.In: The Scientific Diagnosis for Root Canal Treatment, The Quintessence Pub. Co. Ltd.,Tokyo,77-80,1999 (in Japanese).

- 90) Okiji T., Kawashima N., Suzuki N., Suda H.: Roles of nitric oxide in the dental pulp .In: The Scientific Diagnosis for Root Canal Treatment, The Quintessence Pub. Co. Ltd., Tokyo, 40-47, 1999 (in Japanese).
- 91) Kobayashi C., Suda H.: Chapter 3 The analgesia for pulpitis. In: The Clinical Technique for Endodontics, Daiichi Pub., Tokyo, 1999 (in Japanese).
- 92) Kobayashi C.: The root canal preparation by Ni-Ti file with autoreverse handpiece, Ishiyaku Publishers, Inc. Tokyo, 1999 (in Japanese).
- 93) Sawada N., Suda H.: Bacteria in the periapical lesion. In: The Quintessence "YEAR BOOK '99/ Clinical Atlas", The Quintessence Pub. Co. Ltd., Tokyo, 144, 1999 (in Japanese).
- 94) Suzuki N., Suda H.: Bacteria in the root canal after pulpectomy. In: The Quintessence "YEAR BOOK '99/ Clinical Atlas", The Quintessence Pub. Co. Ltd., Tokyo, 144-145, 1999 (in Japanese).
- 95) Sakurai K., Suda H.: Ia antigen expressing cell. In: The Quintessence "YEAR BOOK '99/ Clinical Atlas", The Quintessence Pub. Co. Ltd., Tokyo, 145, 1999 (in Japanese).
- 96) Kobayashi C.: New generation apex locators. In: The Quintessence "YEAR BOOK '99/ Clinical Atlas", The Quintessence Pub. Co. Ltd., Tokyo, 147-148, 1999 (in Japanese).
- 97) Yoshioka T., Suda H.: System B. In: The Quintessence "YEAR BOOK '99/ Clinical Atlas", The Quintessence Pub. Co. Ltd., Tokyo, 151-152, 1999 (in Japanese).
- 98) Wadachi R., Suda H.: Root canal treatment with anaerobic culture and 3-mix. In: The Quintessence "YEAR BOOK '99/ Clinical Atlas", The Quintessence Pub. Co. Ltd., Tokyo, 85-92, 1999 (in Japanese).
- 99) Gotoh M., Suda H.: c-fos and pain control. In: The Quintessence "YEAR BOOK '99/ Clinical Atlas", The Quintessence Pub. Co. Ltd., Tokyo, 142, 1999 (in Japanese).
- 100) Takeda A., Suda H.: Rubber dam at root canal treatment. In: The Nippon Dental Review Separate Volume, 2000, Hyoron Publishers, Inc., Tokyo, 16-19, 2000 (in Japanese).
- 101) Sunakawa M., Suda H.: 3. Physiological aspects of teeth and periodontal ligaments. In: Endodontics 21, Nagasue Pb., Tokyo, 34-43, 2000 (in Japanese).
- 102) Araki K., Suda H.: 10. Case selection, treatment planning, clinical records of treatment. In: Endodontics 21, Nagasue Pb., Tokyo, 163-175, 2000 (in Japanese).
- 103) Ikeda H., Suda H.: 18. Prevention and treatment of accidents. In: Endodontics 21, Nagasue Pb., Tokyo, 295-310, 2000 (in Japanese).
- 104) Sawada N., Suda H.: 23. Surgical endodontics. In: Endodontics 21, Nagasue Pb., Tokyo, 359-374, 2000 (in Japanese).
- 105) Yoshioka T., Suda H.: 26. New endodontics. In: Endodontics 21, Nagasue Pb., Tokyo, 402-415, 2000 (in Japanese).

C. Review Articles

- 1) Okiji T., Suda H.: Root fracture., The Quintessence 12: 2293-2299, 1993 (in Japanese).
- 2) Hirose M., Shibata A.: DNA synthesis and PCR. Molecular Medicine 30: 542-547, 1993 (in Japanese).
- 3) Araki K., Suda H.: CC as an antiseptic of dental root canals. Dental Journal 37: 263-267, 1993 (in Japanese).
- 4) Suda H.: Chronic dental pain. Journal of Japanese Dental Association 46: 17-25, 1993 (in Japanese).
- 5) Suda H.: Changes of pulpal nerve fibers and their projection to the central nervous system after dental deafferentation. Progress in Neuroscience 37: 747-759, 1993 (in Japanese).
- 6) Takeda A., Suda H.: Diagnosis of oral functions and pulpal diseases. Dental Journal 38: 733-743, 1993 (in Japanese).
- 7) Shibata A.: Isolation of human DNA. Molecular Medicine 30: 414-418, 1993 (in Japanese).
- 8) Isaka H., Suda H.: FC as an antiseptic of dental root canals-clinical-. Dental Journal 37: 1039-1045, 1993 (in Japanese).
- 9) Nakajima M., Suda H.: Sterilization and disinfection in dental clinic. 5. Disinfection of dental chair and equipment. The Journal of Tokyo Dental Association 42: 33-39, 1994. (in Japanese)
- 10) Sekine Y., Suda H.: Clinical application of laser to cavity preparation. The Journal of Dental Medicine 39: 289-295, 1994. (in Japanese)
- 11) Tomura J., Kobayashi C., Suda H.: Antibiotic injection therapy in radicular cysts. The Journal of Dental Medicine 39: 453-462, 1994. (in Japanese)
- 12) Sawada N., Suda H.: Treatment of rest pulpitis induced by endodontic failure in curved canal. Dental Diamond 19: 98-99, 1994. (in Japanese)
- 13) Ebihara A., Suda H.: Conservative treatment of periapical lesions. The Journal of Dental Medicine 39: 437-444, 1994. (in Japanese)
- 14) Kobayashi C., Suda H.: New ultrasonic device for endodontics and periodontics -Solfy ZX-. Dental Magazine 81: 52-59, 1994.

- (in Japanese)
- 15) Suda H.: Basic and clinical aspects of dentin hypersensitivity. Dental Outlook 83: 1479-1484, 1994. (in Japanese)
 - 16) Ueno K., Suda H.: Monoinfected periapical tissue responses in gnotobiotic rats. The Journal of the Stomatological Society, Japan. 61: 398, 1994. (in Japanese)
 - 17) Kobayashi C.: Health of tooth and gingiva. J.Jpn.Pharma.Assoc. 46: 965-970, 1994. (in Japanese)
 - 18) Kobayashi C., Suda H.: New ultrasonic device for endodontic and periodontics -A clinical application. Dental Magazine 82: 14-18, 1994. (in Japanese)
 - 19) Izawa T., Kim S., Suda H., Pecora G., Rubinstein R.: Microscopic endodontic surgery. The Quintessence 13: 54-65, 1994. (in Japanese)
 - 20) Yamamoto H., Suda H.: Peripheral mechanisms of tooth pain and chronic pain. Dental Diamond 19: 80-84, 1994. (in Japanese)
 - 21) Kobayashi C.: Material used for the treatment and seal in floor perforation. Dental Diamond 19: 98-99, 1994. (in Japanese)
 - 22) Suda H.: Endodontic treatment of necrotic pulp. The Quintessence 14: 103-109, 1995. (in Japanese)
 - 23) Yamamoto H., Suda H.: Pain from tooth and orofacial region. J. Jpn. Endodon. Assoc. 16: 175-190, 1995. (in Japanese)
 - 24) Yamamoto H., Suda H.: Peripheral mechanisms of dental pain. The Quintessence 14:475-484, 1995. (in Japanese)
 - 25) Shimono M., Suda H., Iijima K.: Effects of dentin/pulp complex concepts on the future dental clinic. The Nippon Dental Review 629: 112-137, 1995. (in Japanese)
 - 26) Suda H.: Mechanism of tooth pain-pain as a sign of the pathological condition. The Nippon Dental Review 629: 84-92,1995. (in Japanese)
 - 27) Yoshino N., Hosokawa A., Sasaki T., Yoshioka T.: Non-surgical treatments of sialolithiasis with fluoroscopy. The Journal of the Stomatological Society, Japan 62: 151, 1995. (in Japanese)
 - 28) Ueno K., Suda H.: Criteria of endodontic success -conservative endodontics-. The Quintessence 14: 36-38, 1995. (in Japanese)
 - 29) Ueno K., Suda H.: Criteria of endodontic success -surgical endodontics-. The Quintessence 14: 42-45, 1995. (in Japanese)
 - 30) Suda H.: Development of the newest canal measuring device. Dental Diamond 20: 26-28, 1995. (in Japanese)
 - 31) Kobayashi C.: ROOT ZX and JUSTY. Dental Diamond 20: 34-39, 1995. (in Japanese)
 - 32) Sekine Y., Ebihara A., Takeda A., Suda H.: Histopathological study of Er:YAG laser application to cavity preparation. The Journal of the Stomatological Society, Japan 62: 453, 1995. (in Japanese)
 - 33) Kobayashi C., Suda H.: Latest electronic root canal length measuring device. The Quintessence 14: 209-213, 1995. (in Japanese)
 - 34) Suda H.: Prospects of dental caries treatment in the 21st century. J. Jpn. Dent. Assoc. 15:96-97,1996 (in Japanese).
 - 35) Yamamoto H., Suda H.: Decisive factors to remove the pulp tissue from the tooth with dentin hypersensitivity. The Nippon Dental Review 642:83-99, 1996 (in Japanese).
 - 36) Sekine Y., Suda H.: Effect of Er:YAG to the pulp. Dental Outlook 88:144-151, 1996 (in Japanese).
 - 37) Kobayashi C.: Mechanical preparation of the root canal. The Nippon Dental Review 646:75-85, 1996 (in Japanese).
 - 38) Sunakawa M., Ikeda H., Yamamoto H., Suda H.: The mechanism of pain 1, Pain pathways and their central mechanism. Dental Outlook 88:429-439, 1996 (in Japanese).
 - 39) Yoshioka T., Suda H.: Topics of pulp and endodontics. Dental Outlook 88:401-411, 1996 (in Japanese).
 - 40) Sawada N., Kim S., Suda H.: Microscopic endodontic surgery and its future. the Quintessence 15:2043-2052, 1996 (in Japanese).
 - 41) Ikeda H., Yamamoto H., Sunakawa M., Suda H.: The Mechanism of pain 2 - Peripheral mechanism of pain. Dental Outlook 88:877-888, 1996 (in Japanese).
 - 42) Yamamoto H., Ikeda H., Sunakawa M., Suda H.: Pain from dental pulp and periodontal tissue. Dental Outlook 88:1117-1126, 1996 (in Japanese).
 - 43) Ebihara A., Suda H.: Swelling at the muco-gingival region of the incisor tooth. Dental Diamond 21: 19-20, 1996 (in Japanese).
 - 44) Sunakawa M., Yoshioka T., Suda H.: Repair of furcal perforation: a long term prognosis of stripping. The Quintessence 16:149-154, 1997 (in Japanese).
 - 45) Sunakawa M., Yamamoto H., Ikeda H., Suda H.: The mechanism of pain 6. The mistery of pain. Dental Outlook 89:1165-1176, 1997 (in Japanese).
 - 46) Suda H.: Microcosmos in the root canal. The Journal of Gunma prefectural Association for Dental Science 1:1-4, 1997 (in Japanese).
 - 47) Kobayashi C.: High efficiency mechanical root canal preparation - a crown-down method with the Tri Auto ZX. Dental Diamond 22:60-63,1997 (in Japanese).
 - 48) Yoshioka T., Suda H.: Which is better for root canal obturation; lateral condensation or vertical condensation? Dental Diamond 22:92-96, 1997 (in Japanese).

- 49) Nishioka M., Shiiya T., Ueno K., Suda H: Intentional replantation - wound healing in germ-free and conventional rats - J. Stomatol. Soc., Jpn. 64:157-157, 1997 (in Japanese).
- 50) Sugizaki M., Amagasa M., Kino K., Sagara N., Sato A., Shiina N., Suzuki N., Suda. H., Beppu S.: Multidimensional evaluation of pain in various dental diseases and examination of expression terms of pain. Journal of the Japanese Association for Dental Science 16:71-76, 1997 (in Japanese).
- 51) Yoshioka T., Suda H.: New topics in endodontics, part 2. Dental Outlook 89:865-873, 1997 (in Japanese).
- 52) Kobayashi C.: A clinical application of the Tri Auto ZX. Dental Magazine 89:25-33, 1997. (in Japanese)
- 53) Ikeda H., Yamamoto H., Sunakawa M., Suda H.: Pain Mechanism Orofacial pain. Dental Outlook 89:665-678, 1997. (in Japanese)
- 54) Shimono M., Inoue T., Hashimoto S., Takahashi K., Suda H., Maeda T., Wakisaka S.: Pathophysiologic studies on dentin/pulp complex. Journal of the Japanese Association for Dental Science 16:77-81, 1997. (in Japanese)
- 55) Kobayashi C.: A new root canal preparation method with nickel-titanium files. Dental Treatment 11: 103-112, 1997. (in Japanese)
- 56) Suda H.: The efficient endodontics. Dental Diamond 22: 60-63, 1997. (in Japanese)
- 57) Yamamoto H., Ikeda H., Sunakawa M., Suda H.: Mechanism and management of dentin hypersensitivity. Dental Outlook 89: 147-160, 1997. (in Japanese)
- 58) Kobayashi C.: Latest endodontics part 1. The Journal of the Japan Dental Association 50:25-29, 1998 (in Japanese).
- 59) Kobayashi, C.: Latest endodontics part 2. The Journal of the Japan Dental Association 50:41-46, 1998 (in Japanese).
- 60) Suda, H.: Medication on the root canal treatment. Dental Diamond 23:24-27, 1998 (in Japanese).
- 61) Yoshioka T., Kataoka H., Suda H.: Root canal irrigation using EDTA solution, The Nippon Dental Review 669:175-180, 1998 (in Japanese).
- 62) Kawashima N., Suda H., Stashenko P.: Kinetics of cytokine production in the experimentally induced mouse periapical lesions. The Journal of the Stomatological Society, Japan 65:349-349, 1998 (in Japanese).
- 63) Yoshioka T., Suda H.: Which is better for root canal instrumentation; manual or mechanical? Dental Diamond 23:136-139, 1998 (in Japanese).
- 64) Kobayashi C.: Crown-down method with orifice shaper and profile. Dental Magazine 94:42-46, 1998 (in Japanese).
- 65) Suda H.: Root canal retreatment. Dental treatment 12:38-46, 1998 (in Japanese).
- 66) Kobayashi C.: New endodontic concept. part 1. -endodontics and exodontics. Dental Outlook 92:1021-1029, 1998 (in Japanese).
- 67) Suda H.: Which length is adopted for root canal treatment decided by either EMR or radiograph when both are not coincided? Dental Frontier QA 5:60-61, 1998 (in Japanese).
- 68) Suda H.: The newly endodontics, Mainichi Life 29:21-24, 1998 (in Japanese).
- 69) Kobayashi C.: New endodontic concept. part 2. -Diagnosis and treatment in endodontics and exodontics. Dental Outlook 92:1253-1262, 1998 (in Japanese).
- 70) Araki K., Suda H.: Application of calcium hydroxide and/or 3-Mix to root canal treatment cases with poor prognosis. the Quintessence Year Book '98, 80-86, 1998 (in Japanese).
- 71) Sunakawa M.: Oro-facial pain originated from odontogenic sinusitis. Dental Diamond 24:69-72, 1999 (in Japanese).
- 72) Suda H.: The present state of root canal treatment part 1. The Nippon Dental Review 677:50-50, 1999 (in Japanese).
- 73) Suda H.: The present state of root canal treatment in 1999. The Nippon Dental Review 677:63-78, 1999 (in Japanese).
- 74) Suda H.: New trend of laser application in endodontics. The Journal of Japan Society for Laser Medicine 20:31-38, 1999 (in Japanese).
- 75) Suda H.: Radicular cyst; bay cyst and true cyst. Journal of the Japanese Association for Dental Science 18:92-92, 1999 (in Japanese).
- 76) Sawada N., Kim S.: Microscope in conventional endodontics. The Nippon Dental Review 678:171-178, 1999 (in Japanese).
- 77) Ikeda H., Suda H.: Pulpal pain: diagnosis of invisible pain. Dental Diamond 24:70-74, 1999 (in Japanese).
- 78) Sawada N., Kim S.: Microscope in endodontic surgery. The Nippon Dental Review 679:149-157, 1999 (in Japanese).
- 79) Suda H.: An illustration of sciences in dentistry; tooth pain. A waiting room in the dental office, 2:4-7, 1999 (in Japanese).
- 80) Kataoka H.: The latest topics of endodontics. Dental Hygiene 19:650-653, 1999 (in Japanese).
- 81) Ikeda H.: Common concept 6, basic procedures of endodontic treatment. Quintessence of Dental Technology Journal for Dental Technicians & Prosthodontics 248:40-45, 1999 (in Japanese).
- 82) Wadachi R., Sakurai K., Suzuki N., Takahashi T., Tomobe T., Fukuda K., Miyara C., Murakoso K., Suda H.: Clinical evaluation of usefulness of ORA inj. cartridge, Dental Diamond 24:154-158, 1999 (in Japanese).
- 83) Hikiji A., Yamamoto H., Sunakawa M., Suda H.: Involvement of the stimulation of the second premolar to increased blood flow and nerve firing in the cat canine tooth. The Journal of the Stomatological Society, Japan 66:415-415, 1999 (in Japanese).

- 84) Suda H.: Diagnosis for pulpal disease. Dental Outlook 94:1348-1353, 1999 (in Japanese).