

ABSTRACT OF LECTURE

Symposium II : The Modern Microscopic- endo-restorative Technique

4月25日(日) 14:00~

座長：三橋 純 デンタルみつはし

三橋 晃 鎌倉デンタルクリニック

歯内療法専門医が考える抜歯基準

澤田 則宏 澤田デンタルオフィス (東京都)

Clinical decision making of Endodontist

Norihiro Sawada (Tokyo)

支台築造におけるモダンテクニックの再考

渥美 克幸 デンタルクリニック K (埼玉県)

Consideration of modern techniques in foundation restoration

Katsuyuki Atsumi (Saitama)

Minimally invasive Prothodontic treatment using all ceramics

内山 徹哉 内山歯科クリニック (東京都)

Minimally invasive Prosthodontic treatment using all ceramics

Tetsuya Uchiyama (Tokyo)

Clinical decision making of Endodontist

Norihiro Sawada

Sawada dental office



Thirty years ago, we sometimes used the word “subclinical fracture” for explaining the reason of extraction. What is “subclinical fracture”? It must be “unknown reasons” for extraction.

Microscope has led us the new stage of saving a tooth. Dentists using Microscope can save the tooth that was extracted by naked eyes. Missed canals, infection not removed completely in canal, and fracture in the tooth are found easily under Microscope. The criteria of extraction have been changed by Microscope.

What is the criteria whether we can save a tooth or not? Can we save the tooth that have a large lesion? What kind of lesion we should do surgery? Can we save the tooth with root fracture? How long does the tooth work?

Endodontist is the specialist of saving tooth. Endodontist can save the tooth which general practitioner couldn't save. However, even Endodontist couldn't save all the teeth. What is the criteria of Endodontist under Microscope? I would like to show my cases and talk about the new criteria for saving the tooth.

Professional career

1988 Graduated from Tokyo Medical and Dental University
1992 Received the Ph.D (Tokyo Medical and Dental University)
1992 Tokyo Medical and Dental University, Dental Hospital
1995 Research associate, Tokyo Medical and Dental University
1997 University of Pennsylvania, USA
2002 Sawada Dental Office
Tokyo Medical and Dental University, Part-time instructor

Affiliation society

Japan Association of Microscopic Dentistry
The Japanese Society of Conservative Dentistry
Japan Endodontic Association
American Association of Endodontists

Consideration of modern techniques in foundation restoration

Katsuyuki Atsumi

Dental Clinic K



Some of the main failures of foundation restoration include detachment, root fracture, and coronal leakage. In addition, these problems cannot be solved through abutment construction with the metal materials which have been used up until now.

On the other hand, I believe that fiber-reinforced composite resin post and core can achieve superior results. In order to make the most of the advantages of glass fibers, we need to sort through the vast volume of knowledge on this topic, and we must also investigate related factors (ex. the proper way to use glass fibers for the reinforcement of composite resin).

I will talk about 3 key points about foundation restoration for this time: requiring supragingival tooth structure, fiber arrangement and adhering to root canal dentin.

Professional career

2002 Graduated from Nagasaki University School of dentistry (DDS)

2002-2010 Worked at Akabane Dental Clinic

2010 Established Dental Clinic K

Affiliation society

Certified Member of the Japan Association of Microscopic Dentistry

Certified Member of the Japan Society for Adhesive Dentistry

Part-time faculty in Nagasaki University School of Dentistry

Minimally invasive Prosthodontic treatment using all ceramics

Tetsuya Uchiyama

Uchiyama Dental Clinic



In the past several years, crown prosthetic treatment is in a period of great change. What is in the midst of this revolution is the emergence and popularization of ceramic copings that not only use metals, but also have higher aesthetics and physicality, such as zirconia and lithium disilicate in recent years.

Conventional metal ceramics are excellent materials with much evidence. However, since the material uses metal coping, it is necessary to block the metal color with opaque porcelain when trying to make an aesthetic prosthesis. Furthermore, by building dentin and enamel porcelain on it, a crown prosthesis with excellent aesthetics is completed. Moreover, in order to acquire this 4 layer structure, fixed thickness is needed for a prosthesis. Along with this, a large amount of preparation is required, and if it is a vital tooth, the risk of intraoperative and postoperative pain, and of course, pulp extraction increases.

In other words, when performing dental prosthetic treatment using metal ceramics, aesthetics and preservation of tooth quality are inextricably linked.

However, ceramic copings with high aesthetics and excellent physical properties, such as zirconia and lithium disilicate, do not use metal copings, so that the crown can be restored in a single structure or in a form close to that.

Therefore, the amount of abutment tooth preparation during the crown restorative treatment was greatly reduced, and it became possible to acquire aesthetics with preserving more tooth structure.

In addition, the crown restorative treatment using a microscope can be carried out while confirming the details of the treatment by enlarging it, so that more tooth quality can be preserved.

In this lecture, I will explain how the abutment preparation of the author has changed with changes in the materials used.

Professional career

2004 graduated from tokyo dental college

2010~ UCHIYAMA dental clinic