

# Microendodontics: How it contributes to the conservation of natural teeth

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

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

## CV

1984 DDS (Tokyo Medical & Dental University)

1988 PhD (Tokyo Medical & Dental University)

1996 PhD (Göteborg University)

2001-2003 Professor, General Dentistry & Clinical Education Unit, Niigata University Dental Hospital

2003-2014 Professor, Division of Cariology, Operative Dentistry & Endodontics, Graduate School of Medical & Dental Sciences, Niigata University

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