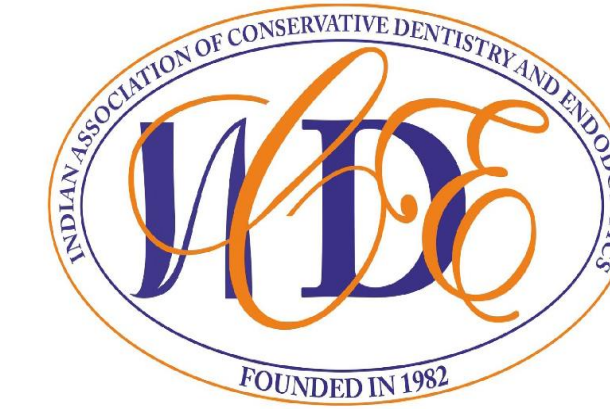




EAER – KILL THE DRILL

POSTER CODE : PGE 177

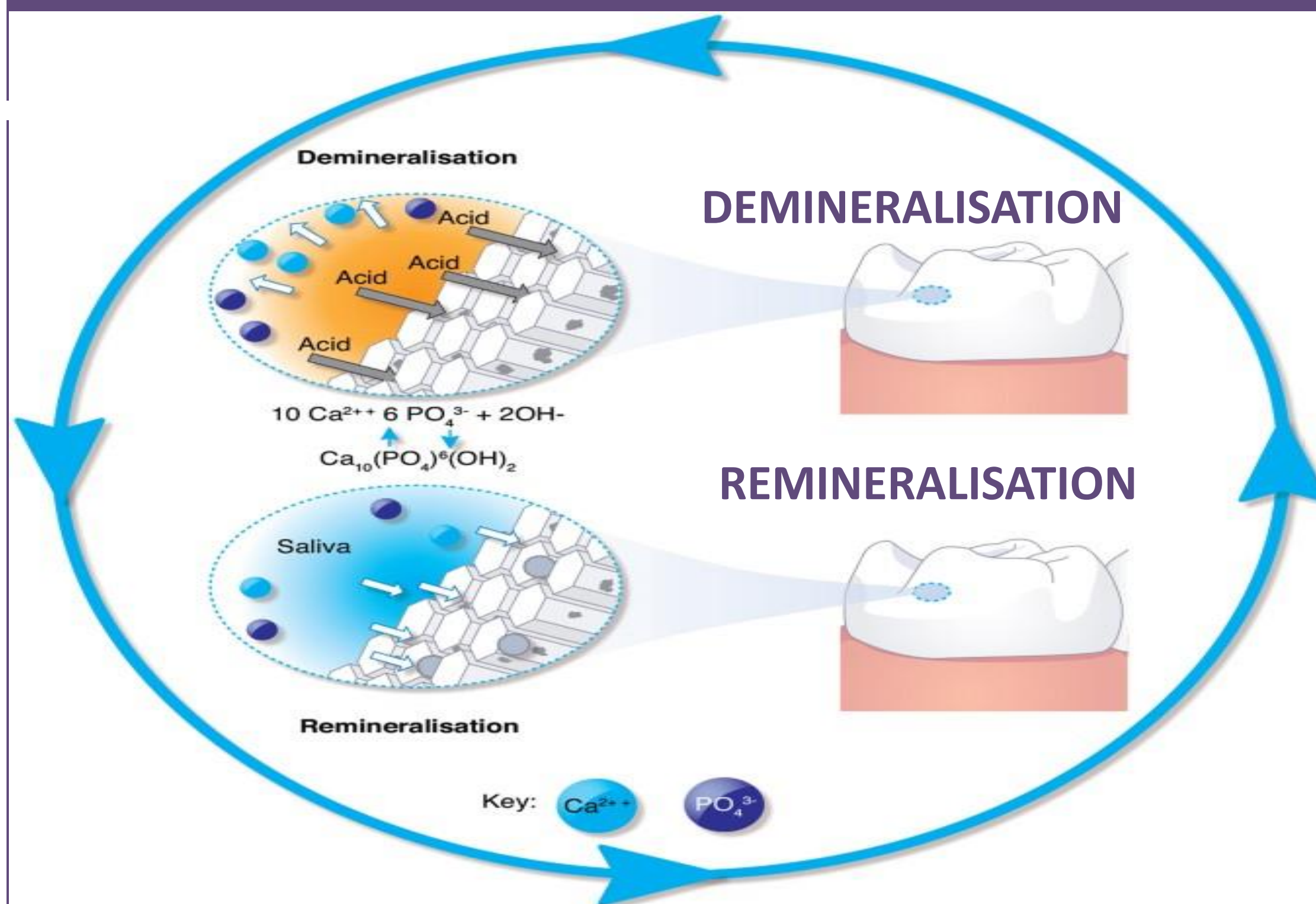


39th IACDE
National Conference



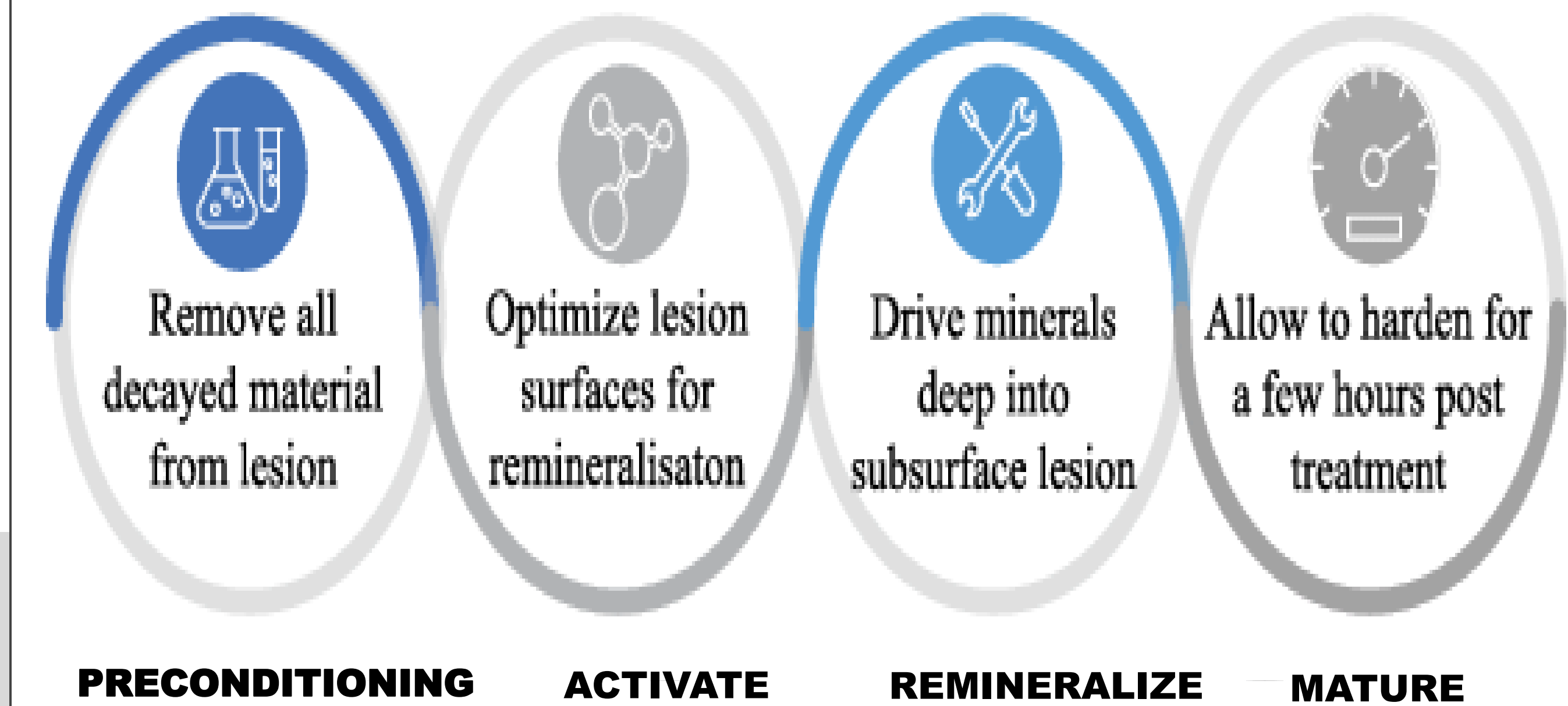
INTRODUCTION

- WHO Global Oral Health Status Report (2022): Two billion people suffer from caries of permanent teeth
- **Remineralization** procedures are the most preferred and optimal way of **regeneration** of lost tooth structure



YEAR	POSITION OF CARIES BALANCE	Reminova Ltd, King's College London -- A Novel Clinical Method of Caries Remineralization (Pitts & Wright, 2018): ELECTRICALLY ACCELERATED AND ENHANCED REMINERALIZATION (EAER)
1981 TO 2017		
AIM FOR EAER 2018		

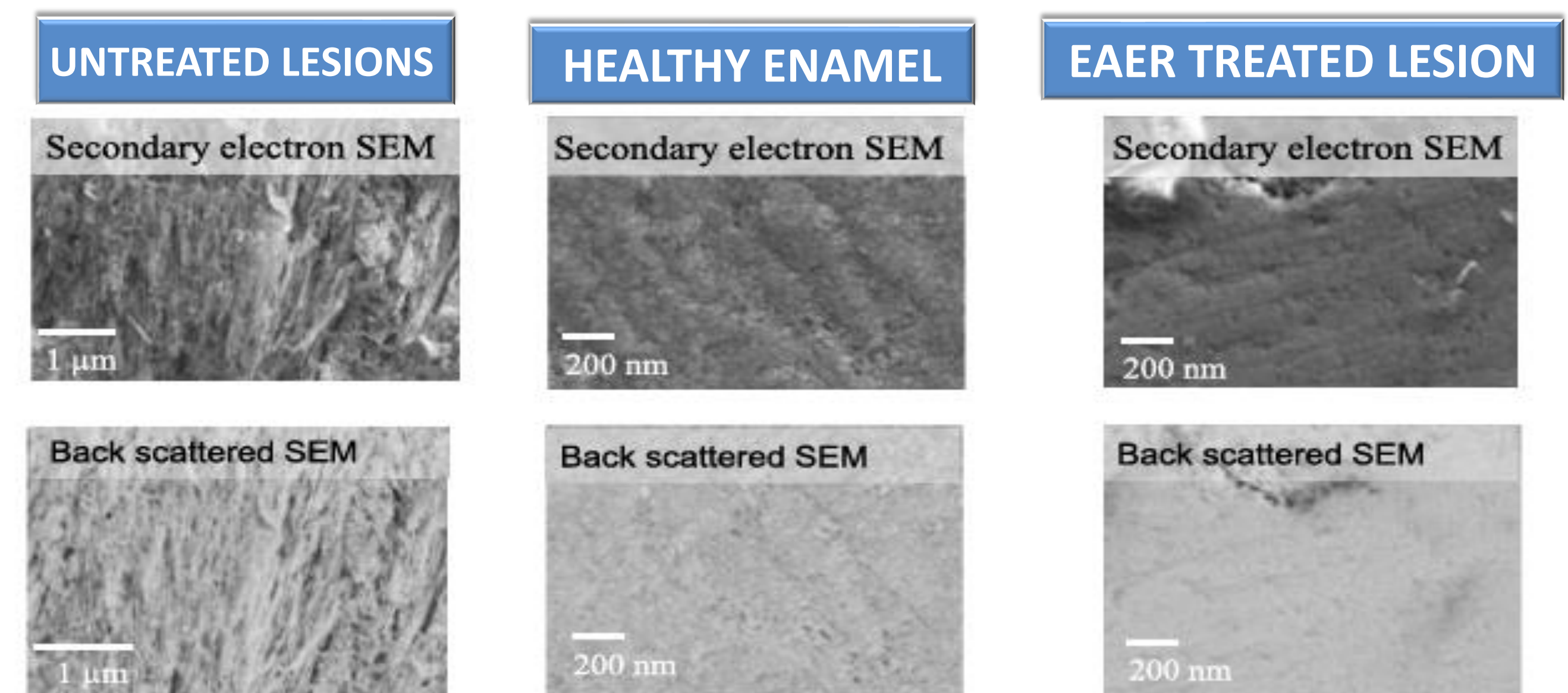
EAER: Restoring Caries Lesions to the equivalent of Healthy Enamel



MECHANISM

Iontophoresis -- which increases the concentration of all the natural minerals at the site which is to be repaired -- with the help of electric field from a custom-made dental device (healing hand piece)

SEM examinations corroborate enamel microhardness results

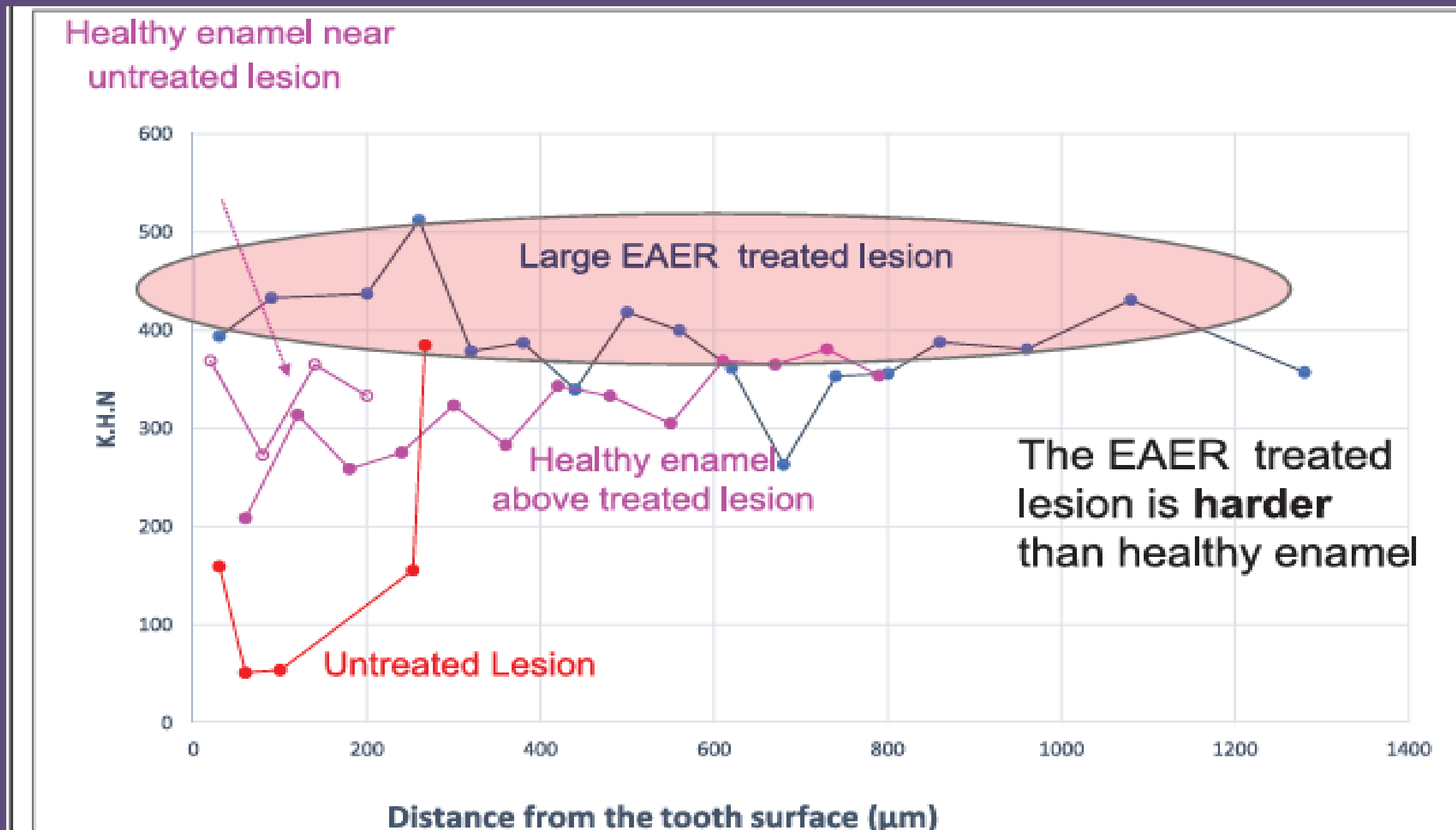


The enamel prism structure is clear, rods are broken & demineralised

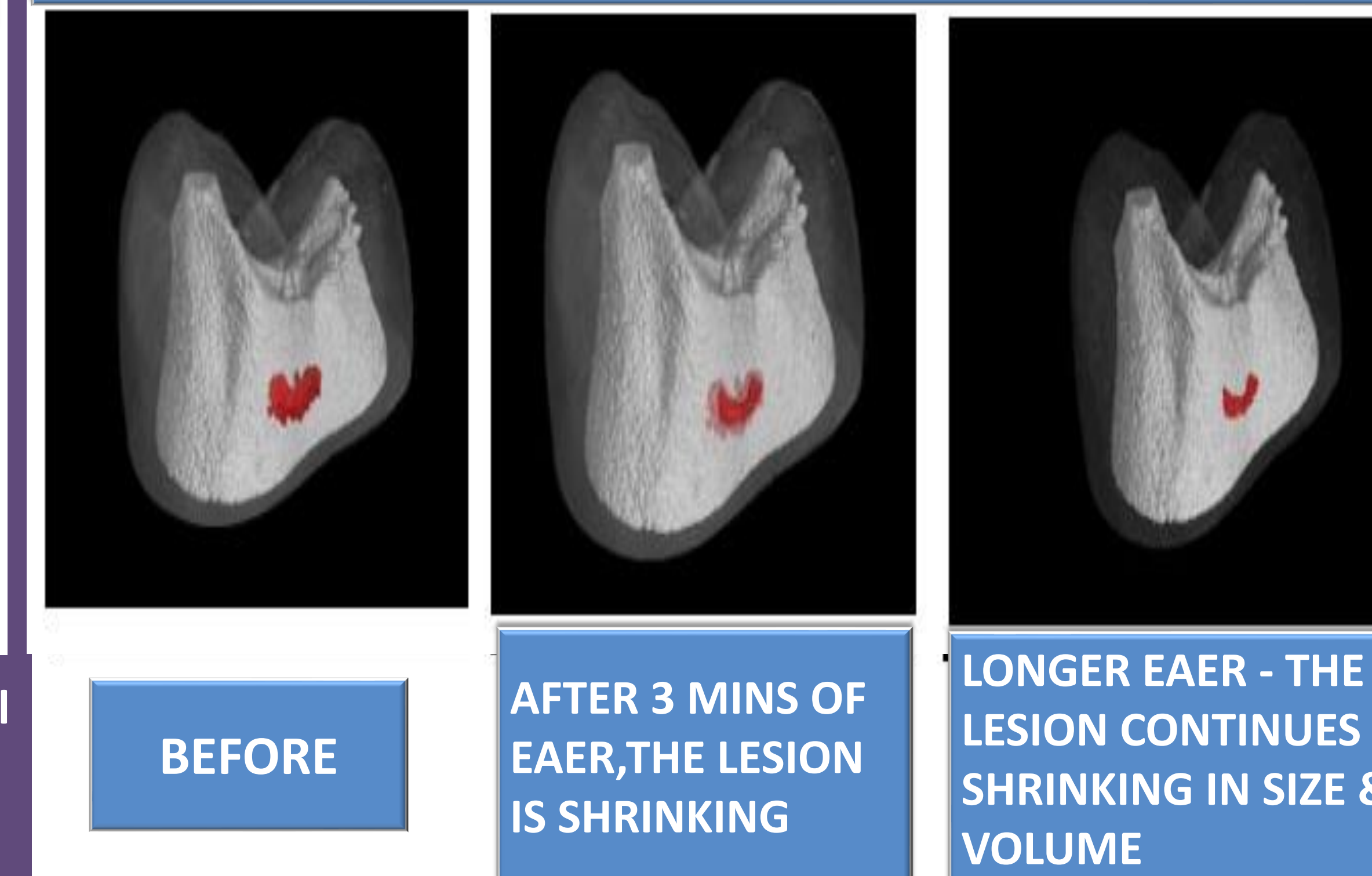
The area shows minimal texture & is highly mineralised

Similar to healthy enamel
No degraded prisms / broken rods visible

ICDAS 2 EAER TREATED & ADJACENT UNTREATED LESION



A LESION "SHRINKING" DURING EAER TREATMENT ASSESSED BY REPEATED MCT IMAGING



ADVANTAGES



LIMITATIONS

- Less evidence of successful clinical trials

CONCLUSIONS

- Developing technology --- shift to non-invasive methods
- Effective and one of the safest techniques
- With these newer innovations the future of dentistry looks promising without drills



- **References:**
- Kamala C, Gopala Krishna Ganta, Anoosha Manda. EAER: An Alternative and Effective Remineralization Method. *Int J Dent Mater* 2019;1(1):36-39.
- Pitts, N. B., & Wright, J. P. (2018). Reminova and EAER: Keeping Enamel Whole through Caries Remineralization. *Advances in dental research*, 29(1), 48-54.