

The 11th Conference of Asian International Association of Dental Traumatology (11th AADT, Tsukuba)

– Call For Papers –

President of 11th AADT: Prof. Toru Yanagawa, Department of Oral and Maxillofacial Surgery, Institute of Medicine, University of Tsukuba, Tsukuba, Ibaraki, JAPAN

Conference Secretariat, Executive Committee Chairman:

Assistant Prof. Fumihiko Uchida, Department of Oral and Maxillofacial Surgery, Institute of Medicine, University of Tsukuba, Tsukuba, Ibaraki, JAPAN

Date: 29-30 March 2025

Conference format: Held in the Journal

ABSTRACT

Instruction

1. All presentation must be done in English (Font: Times New Roman, 12 points).
2. Size: A4
3. Title (Font: Times New Roman, 14 points, Bold), Name (e-mail of corresponding presenter), Affiliation and address, Your photo (about 3 X 4 cm), Abstract (maximum 300 words, Objective, Materials & Method, Results, Conclusion), Key words (3 – 5 words)
4. Brief CV (Educational background and Professional experience) Halfpage
5. Contact to: Dr. Fumihiko Uchida, University of Tsukuba, e-mail: The11thAADT@gmail.com
6. We are accepting your presentations, so we are looking forward to applying for a presentation

***Abstract submission deadline : Saturday, 4 January, 2025**

【For Example】

Peroxiredoxin acts protectively on osteoclasts against oxidative stress when teeth are injured.



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Objects: When teeth are traumatized, the jawbone undergoes oxidative stress due to inflammation and other factors. Peroxiredoxin is a thioredoxin-dependent hydrogen peroxide scavenging enzyme as an antioxidant protein with isoforms I - IV. In the present study, we investigated the effects of oxidative stress on bone using Peroxiredoxin I (Prx I) knockout mice.

Materials and Methods: Prx I knockout mice were generated from ES clones (OST422296: Lexicon Genetics Inc.) using the gene trap method. These mice were compared with wild-type mice by X-ray examination, microfocus CT imaging, bone densitometry by DXA, and bone morphometry. Macrophages were also collected to examine their ability to resist oxidative stress.

Result: Screening by simple radiography revealed no obvious abnormalities, but microfocus CT showed increased bone cortex in Prx I knockout mice, and bone densitometry by DXA showed increased bone density. In addition, bone morphometry showed a decrease in osteoclast count and osteoclast surface.

Conclusions: These results suggest that loss of Prx I in response to trauma-induced oxidative stress may result in bone mutations that are more damaging to the osteoclast lineage.

Key Words: Peroxiredoxin, Oxidative stress, Knockout mouse, Bone morphometry, DXA.

Brief CV

1999-2010: Assistant Professor, Department of Oral and Maxillofacial Surgery, Institute of Medicine, University of Tsukuba.

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