

## Retraction

# Three-dimensional finite element stress analysis of micro-implant anchorage-assisted intrusion of orthodontic teeth molar [Retraction]

Yan WJ, Shao P. *International Journal of Clinical and Experimental Medicine*. 2017;10:14695-14698.

This article was retracted for two primary reasons. Citation misuse and contradictory findings. Explanations are detailed below.

1. Serious Citation Misconduct and Lack of Scholarly Rigor. The arguments supporting its research rely heavily on the cited references. However, upon verification, a substantial number of citations are entirely unrelated to the paper's core domain of orthodontic biomechanics, implant mechanics, or finite element analysis methodology. This irrelevance is not peripheral but strikes at the foundation of the paper's methodological and discursive support. Examples include:

Reference [1] dealing with "Design and Chromatic Aberration Analysis of Plasmonic Lenses Using the Finite Element Method", belonging to optical engineering.

Reference [2] discusses "Nonlinear Semi-Analytical Finite Element Algorithm for the Analysis of Internal Resonance Conditions in Complex Waveguides", belonging to wave dynamics/applied mathematics.

Reference [15] concerns "Thermal Analysis of Breeder Unit for Helium Cooled Solid Breeder Blanket of Chinese Fusion Engineering Test Reactor", belonging to nuclear engineering.

Reference [17] studies "Effect of atomic-level stresses on local dynamic and mechanical properties in CuZr metallic glasses: A molecular dynamics study", belonging to computational materials science.

These references do not provide support for any statement in the paper regarding mini-

implant design, bone biomechanical response, finite element modeling assumptions, or discussion of results. Such extensive and systematic use of irrelevant citations constitutes a severe breach of fundamental academic citation practices. It therefore fails to substantiate the arguments and strongly suggests a lack of proper scholarly foundation for the research discussion, amounting to serious academic misconduct that nullifies the academic credibility of the entire paper.

2. Unresolvable internal contradictions in findings and misleading conclusions. A core conclusion of the article states that the displacement of the mini-implant "decreased with the increase of the tilt angles". This generalized claim directly conflicts with the key data reported in the paper itself.

In Table 3, illustrating "Peak displacement analysis", the reported peak displacement values are: 30° (6.8375 μm), 45° (6.4853 μm), 60° (6.9453 μm), 75° (6.4794 μm), 90° (6.7584 μm).

These data clearly show that the largest peak displacement (6.9453 μm) occurred at a 60° tilt angle. This value is higher than the displacements at 45°, 75°, and 90°, and is comparable to the value at 30°. This unequivocally demonstrates that peak displacement did not exhibit a monotonic decreasing trend with increasing angle.

The authors, in both the abstract and discussion sections, overlooked or misinterpreted this critical internal data conflict, presenting an absolute conclusion that aligns with one subset of data (mean displacement) but blatantly contradicts another key dataset (peak displacement). In biomechanical safety assessment, peak displacement is a critical indicator of

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localized stress concentration and potential failure risk. Selective reporting or misinterpretation of such data can mislead clinical judgment regarding mini-implant stability.

To uphold the integrity of the scientific record and prevent academic confusion, the authors unanimously request the full retraction of this

article from the journal. They apologize sincerely to the editors, reviewers, readers, and the scientific community for any inconvenience or misunderstanding caused by this error.