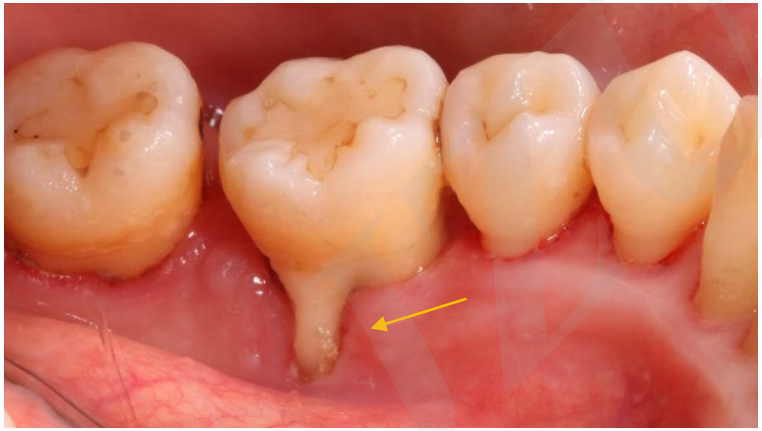
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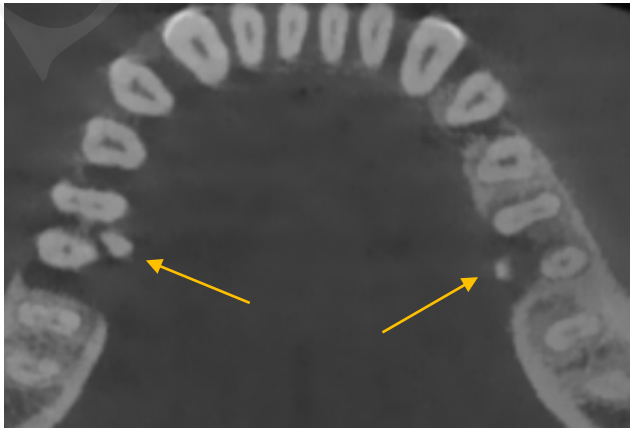
Clinical relevance of distolingual roots and periodontal status in mandibular first molars: a cross-sectional study employing CBCT analysis

Key words: Distolingual root; Mandibular first molars; Periodontal clinical parameters; Clinical attachment loss; CBCT

Research Summary

This study mainly focused on the prevalence of the distolingual roots in permanent mandibular first molars (PMFM-DLR) with Eastern Chinese ethnic background and evaluate the correlation between the morphological features of PMFM-DLR and periodontal status.





Innovation points

- **Investigation of PMFM-DLR prevalence in Eastern China.**
- **Measurement the morphological features of PMFM-DLR employing CBCT analysis.**
- **Evaluation of the correlation between the morphological features of PMFM-DLR, bone loss and periodontal clinical parameters.**





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Results

- **The patient-level and tooth-level prevalence of DLR in mandibular first molars was 29.4% and 26.3% in patients with Eastern Chinese ethnic background.**
- **There was a significant positive correlation between bone loss at the buccal site and the length of DLR**
- **Bone loss at the lingual site and CAL were negatively affected by the angle of separation between distolingual root (DL) and mesial root (M) in the transverse section, while they were significantly influenced by age and the angle of separation between distobuccal root (DB) and M in the coronal section.**

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