

Clinical Image

CBCT: An Effective Tool in Endodontics

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An appropriate identification of root canal plays an important role in successful endodontic diagnosis and treatment. 2-dimensional radiographs have limited scope in the identification of canals in buccolingual direction. This drawback has been overcome by the introduction of CBCT which produces a high contrast 3-dimensional image [1].

The image shows an endodontically treated maxillary left first molar in the axial section (Figure 1). The treatment was done after assessing periapical radiograph. However, during the CBCT imaging in the axial section unfilled canal could be seen in relation to the mesiobuccal canal which was further confirmed in the sagittal section (Figure 2).

The intraoral periapical radiograph failed to demonstrate the canals in the buccolingual direction, which has led to failure of root canal treatment leading to persistent infection. Thus CBCT is an imaging modality which has potential to improve the quality of root canal treatment.

References

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Figure 1: Axial CBCT section showing unfilled mesiobuccal canal.



Figure 2: Sagittal CBCT section showing unfilled canal.