

Ledge formation: Review of a great challenge in endodontics

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Abstract: Failure to grasp the rationale behind cleaning and shaping concepts can increase the occurrence of needless complications, such as ledges. A ledge is created when the working length can no longer be negotiated and the original pathway of the canal has been lost. Extension of the access cavity to provide unobstructed access to the root canals, precurving and not forcing instruments, using NiTi files, using passive step-back and balanced force techniques, and instrumenting the canal to its full length will all help to prevent ledge formation. Initial negotiation and bypassing the ledge can be achieved using a small file with a distinct curve at the tip, whereas a slight rotation motion of the file combined with a "picking" motion can often help advance the instrument. A review of the literature and a discussion of the options for prevention, recognition and managing the ledge are presented.

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