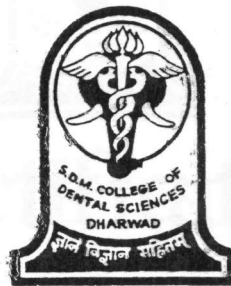


PREVALENCE OF ACCESSORY CANALS ON THE PULPAL FLOOR OF DECIDUOUS MOLARS - A SCANNING ELECTRON MICROSCOPE STUDY



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The tooth, pulp and its supporting structures must be viewed as one biological unit. It is seen that pulpal and periodontal problems are responsible for more than 50% of tooth mortality. There is a general consensus that a direct interrelationship exists between the pulp and the periodontal tissue. Many a times failure of endodontic treatment has been attributed to the presence of accessory and lateral canals in both primary and permanent teeth, which makes a definitive communication between the pulp and supporting structures.

Hence for a successful endodontic treatment of any tooth it is necessary to understand the anatomy of the pulp, root canal as well as a basic knowledge of the gross and microscopic relationships of the tooth to its surrounding structures, and also to eliminate all potential sources of infection. Accessory canals in the bifurcation and trifurcation of human primary and permanent molar teeth connecting the pulp and periodontal membrane have been discussed.²⁰

Accessory canals are as a result of a localized failure in the formation of Hertwigs Sheath during embryonic stages of tooth formation. This defect is probably due to the persistence of abnormally placed blood vessels, reaching the pulp, this leads to