Bifid Mandibular Canal in Children- A Literature Review and Report of Four Cases.

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Purpose: The purpose of this study was to review the literature on bifid mandibular canals (BMC) in pediatric patients and present four cases of children with BMC.

Method: Medical subject headings (MeSH) were generated and used to conduct PubMed®/MEDLINE literature search on BMC. After initial abstract review, articles meeting the selection criteria were reviewed. Additionally, panoramic radiographs from four children with unilateral or bilateral BMC were discussed.

Results: The literature search revealed BMC prevalence of 0-38.7% and 15.6-65.0% in adults using panoramic and cone beam computed tomographic (CBCT) images, respectively. The prevalence of BMC in children was 27% using CBCT images. The most common type of BMC was retromolar canal (11.1%); whereas, commonly reported clinical implication of BMC was failure to achieve adequate inferior alveolar nerve block.

Conclusion: Although limited, routine panoramic radiographs are diagnostic for BMC in children and such a finding should be considered during restorative-surgical care.