

Original Paper

## Assessment of visibility and extension rate of incisive branch of the inferior alveolar nerve in cone beam computed tomography imagings

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### Abstract

**Background and Objective:** Many surgeries are performed on anterior region of mandible. Incisive branch of the inferior alveolar nerve is located in the anterior region of mandible. The identification of various form of nerve is important for diagnosis and treatment plan. This study was carried out to the assessment of visibility and extension rate of incisive branch of the inferior alveolar nerve in cone beam computed tomography (CBCT) imagings.

**Methods:** This descriptive – analytic study was performed on 105 CBCT images. The presences or absence of incisive branch of the inferior alveolar nerve and assessment of visibility and extension rate of mandibular incisive canal were studied.

**Results:** In 79% extension of the incisive branch of the inferior alveolar nerve were observed. 18.07% of extensions were observed in one-side and 78.31% were bilateral. Extension of the incisive branch of the inferior alveolar nerve was observed to central, lateral and canine tooth in 59%, 26.5% and 14.5% respectively. There was no significant relation between gender and age of subjects with extension of the incisive branch of the inferior alveolar nerve.

**Conclusion:** Regarding the high visibility of the incisive nerve branches in the lower dental CBCT images this method can be used to evaluate the anterior region of mandible.

**Keywords:** Inferior alveolar nerve, Cone beam computed tomography

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