



## **RADIOGRAPHIC ESTIMATION OF MENTAL NERVE LOOP POSITIONING. - A PILOT STUDY**

Ramya. G<sub>1</sub>, Dr. Dhanraj<sub>2</sub>, Dr. Kiran Kumar<sub>3</sub>

Modern dentistry has changed tremendously with implant therapy. The anterior loop is described as the mental canal which rises from the mandibular canal and runs outward, upward and backward to open at the mental foramen, it cannot be detected clinically hence accurate radiographic examination is essential to help determine the nerve anatomy for dental implant placement. The aim of the current study was to assess the prevalence of anterior loop of mental nerve by using CBCTs, comparing the right and left side mental foramen, assessing the diameter of foramen and other factors.

The CBCT's of 30 patients were assessed to check for the presence or absence of looping of the mental nerve. The dimensions of the mental foramen was compared on the right and left side based on its shape, size, extent with relation to mandibular 2nd premolar and lower border of mandible. Galileos implant viewer software was used in measuring the parameters and CATVvision software was used for nerve tracing and mental loop assessment and visualization.

It was observed that the prevalence of anterior looping of the mental nerve in this study was 10%. It was observed that looping was found in the left side predominantly in this study. The study shows a female predilection of 63%. On Chi-square analysis the position of the mental foramen from the lower border of the mandible was found to be statistically significant ( $p < 0.05$ ). However no significant difference was observed with respect to mental nerve looping on the basis of gender or side of loop being present.

Table depicts the association between looping of mental nerve and distance of mental foramen from lower border of mandible found to be statistically significant.

Graph depicts the prevalence of looping on either side of mental foramen as observed in this study.  
Graph depicts the shape of mental foramen as observed in this study