

Mental foramen is a very important anatomical landmark in dentistry and knowledge about mental foramen is very important because it transfers the mental nerve and vessels. The aim of this research was to study the morphology and morphometry of the mental foramen using cone beam computed tomography in dentate adult Kurdistan patients. Thirty nine cone beam computed tomography were studied to analyze the shape, position, distance, and diameter of mental foramen.

It was found that the most common variation of mental foramen was oval shape, and situated in line between 1<sup>st</sup> and 2nd premolar, and apical to the apex of associated tooth, and these variations showed a nonsignificant differences with the gender and age. The mean distances from mental foramen to the alveolar crest in the right and left side was  $13.37 \pm 2.41$  and  $13.60 \pm 1.96$  mm respectively, and the mean distances from mental foramen to the inferior mandibular border in the right and left side was  $10.98 \pm 1.97$  and  $10.82 \pm 1.95$  mm respectively. Statistical analysis showed no significant differences regarding the gender and side, but significant difference present regarding age group.

The mesio-lateral mean distance in the right and left side was  $3.87 \pm 0.85$  and  $3.68 \pm 0.78$  mm respectively. But the superior-inferior distance in the right and left side was  $3.17 \pm 0.85$  and  $3.25 \pm 1.00$  mm respectively. Statistical analysis showed no significant relation present with the gender, age group, and side. Knowing the exact location of the mental foramen and its variations is very important and can help to plan surgical procedures properly.