

Abstract

Introduction: Precise location of the mental nerve is important in implant surgery, administration of mental nerve block anaesthesia, and for osteotomy procedures. The position is known to show inter-population differences but data from sub-saharan region is scarce.

Methods: The point of emergence of 64 nerves was studied and data analyzed with Microsoft Excel 2010 and differences in side means compared using the paired one tailed student's *t* test.

Results: The location of left mental nerve was 2.85 (± 0.38) cm, 1.42 (± 0.33) cm, 1.77 (± 0.46) cm while the right was 2.91 (± 0.47) cm, 1.38 ($\pm 0.3.1$) cm, 1.71 (± 0.46) cm from the mental symphysis, inferior border of mandible and cemento-enamel junction respectively. The differences in position between the right and left sides were not statistically significant ($p < 0.05$ CI: 95%). It emerged inferior to but in line with the 2nd premolar in 57.8% of the cases, 2nd premolar-1st molar (25%) and inter-premolar junction (9.4%). Unique to this study, was the location of the MN at the canine (3.1%), and 1st molar (4.7%) positions.

Conclusion: The aberrant position of the mental nerve seen in 42%, is an important consideration for tooth implants and placement of mandibular reconstruction plates.