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 (±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 2\textsuperscript{nd} premolar in 57.8% of the cases, 2\textsuperscript{nd} premolar-1\textsuperscript{st} molar (25%) and inter-premolar junction (9.4%). Unique to this study, was the location of the MN at the canine (3.1%), and 1\textsuperscript{st} 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.