Position, shape and direction of opening of the mental foramen in dry mandibles of Tanzanian adult black males

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SUMMARY

This study was aimed at documenting the location, shape, and direction of the opening of the mental foramen in dry mandibles of adult black Tanzanian population. A hundred mandibles were available for studying.

In 45% the mental foramen was located below the apex of the second premolar, 35% between the second premolar and the first molar, 12% between the first premolar and second premolar and 8% below the first molar. The mental foramen was asymmetrically located between the right and left sides in 78% of the mandibles. The shape of the mental foramen was oval in 54% and rounded in 46% of the mandibles observed. The direction of opening was superiorly in 44%, posterosuperiorly in 40%, labially in 10%, mesially (anteriorly) in 3%, and posteriorly in 3%. Unilateral double mental foramen was observed in 3% of the mandibles.

In conclusion these results showed that the mental foramen in the dry mandibles of adult black male Tanzanians was located mostly below the apices of the second premolar or more posteriorly (80%) while only a small percentage was located between the first and second premolars. This is different from previous reports. In more than half the shape was oval and it was rounded in less than half of the mandibles. The opening was mainly superiorly and posterosuperiorly, with a small percentage opening labially, mesially (anteriorly) and posteriorly.

INTRODUCTION

The mental foramen is located on the labial (outer) surface of the body of the mandible on the symphyseal region and transmits the mental nerve and vessels to supply the lower lip and the chin, and the gingiva in the symphyseal region. The position, shape, size, and the direction of opening of the mental foramen have been indicated to vary in different population groups and with sex (Mwaniki et