

RADIOGRAPHIC ANALYSIS OF THE MENTAL FORAMEN AND MANDIBULAR CANAL LOCALIZATION

Mihajlo Petrovski^{1*}, Svetlana Jovevska¹, Olivera Terzieva-Petrovska¹, Ana Minovska¹

¹Faculty of Medical science - Dental Medicine, Goce Delcev University, Krste Misirkov 10-a, 2000 Stip, Macedonia

*e-mail: mihajlo.Petrovski@ugd.edu.mk

Abstract

Evaluation of the position of mandibular canal and *foramen mentale* have great significance and it is very important aid in different dental procedures, such as: surgical, dental implant, periodontal, endodontic as well in diagnostic procedures. The main aim of this study was to evaluate the detection of mandibular canal and the mental foramen on classic and digital panoramic radiographs among the population in Macedonia.

A total number of 300 panoramic radiographs were evaluated. This investigation was including, the both types of panoramic x-rays, digital or classical. Assessment of the presence of *foramen mentale* and its relation with the adjacent structures and the mandibular canal was made by five independent examiners.

According to the data from this research, in near 60% from the analyzed x-ray images, *foramen mentale* is positioned between the roots of the first and second lower premolars. Most commonly found position of *foramen mentale* is between the vertical axis of the second premolar and the line passing between the first and second premolars in the lower jaw in 46.97%. According to the data presented in our research, the mandible canal in about half of cases (more precisely 47.61%) has a descending path through the mandible's body passing from the second lower molar to the *foramen mentale*.

Most commonly *foramen mentale* is localized between the first and second lower premolars, while the *canalis mandibularis* most often possesses a descending path through the mandible's body passing from the first lower molar to the *foramen mentale*.

Key words: *Canalis mandibularis, Foramen mentale, Panoramic x-ray imaging, Mandibular canal, Mental foramen.*