

Conference Abstract

DAY 1 15th September 2023 (Friday)

ORAL 1

2.00-3.30 pm

Scientific Session 8

A Morphometric study of nutrient foramen in dry adult human fibula bone**Rajapur Parashuram**

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Background: It is the lateral and smaller bone of the leg. The fibula is much more slender than the tibia and is not directly involved in transmission of weight. The nutrition & growth of the bone depends mainly on the nutrient artery. A little proximal to the midpoint of the posterior surface, a distally directed nutrient foramen on the fibular shaft receives a branch of the fibular artery. The Topographical knowledge about these foramina is useful in certain surgical procedures to preserve the circulation.

Methodology: The study was conducted on 100 dry adult human fibulae of both sides of unknown sex, collected from department of Anatomy, Mysore medical college & research institute, Mysuru, Karnataka. Total fibular length along with the location, number, and direction of all the nutrient foramen present were recorded. The bones were photographed & data obtained was tabulated, results noted and the inference was drawn.

Result: The present study showed that 95 fibulae had a single nutrient foramen & 5 bones had two. The most common location of nutrient foramen was on the medial crest (60 bones), followed by between medial crest & posterior border (25 bones), between the medial crest & interosseous border (12 bones), & on the posterior border (3 bones). The most common location of nutrient foramen was in the middle 1/3 rd of the shaft.

Conclusion: The morphometric & topographical knowledge of the nutrient foramen and its variations is of immense importance for surgical procedures like fracture healing & bone grafting.

Key words: Nutrient foramen, Nutrient artery, Fibula, Foraminal Index, Free vascularised bone graft.