

Conference Abstract

DAY 1 15th September 2023 (Friday)

ORAL 1

2.00-3.30 pm

Scientific Session 10

Case Study on Nutrient Foramina of Femur in South Indian Population**Revathy R, Sumathi S, Priya Ranganath**

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Background: Femur is the strongest and longest weight bearing bone in the human body. Adequate knowledge of blood supply and nutrient foramina of bone is essential to prevent complications in orthopaedic, plastic, reconstructive and microvascular surgeries.

Aims & Objectives: To study the morphological features of nutrient foramina of femur such as number, direction and position in South Indian population

Materials & Methods: The present study is conducted in 100 adult dry femur bones in department of Anatomy, Bangalore Medical College & Research Institute, Bangalore. The femur bones were examined for length, number of nutrient foramina & position of nutrient foramina

Results: The study shows mean femoral length of south Indian population as 42.47 +/- 2.78 (n=100). Nutrient foramina in femur is absent in 3% subjects. 48% having single, 46% double, 2% triple, 1% quadruple nutrient foramen. The location of nutrient foramina is predominantly seen on midshaft anteromedial surface. The direction of all nutrient foramina is vertically downwards

Conclusion: The adequate knowledge on the number, position, direction of nutrient foramina in the diaphysis of femur is essential to prevent the complications related to the trauma on the nutrient vessels during surgical procedures. The findings in this study will be helpful for various femoral surgeries like fracture treatment, bone grafting, and other microvascular surgeries of femur.

Keywords: femur, nutrient foramina, blood supply of femur