

### Study of diaphyseal nutrient foramina of humerus

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#### Abstract:

**Background & Objectives:** To know the number, direction and common position of nutrient foramina and its variation and to determine the caliber of diaphyseal nutrient foramina. **Material and method:** The present study was conducted on 100 adult human dried humeri, of unknown age and sex, from the department of Anatomy, B. J. Medical college, Ahmedabad. The nutrient foramina were observed with the help of a hand-lens. They were identified by their elevated margins and by the presence of a distinct groove proximal to them. Only well-defined foramina on the diaphysis were accepted. **Result:** Present study found single foramen seen in 72% cases, double foramina found in 15% cases, triple foramina found in 2% cases while in 11% cases foramen was absent. In this study most common location of nutrient foramen was on the antero-medial surface (79.7%) of humerus, 51.9% were dominant foramina and 48.1% were secondary foramina.. Direction of nutrient foramen was towards the elbow i.e. away from growing end. **Conclusions:** Knowledge of this position can help the surgeons as it is the zone during surgical interventions for fractures in the middle 1/3rd of humerus. It will help to prevent intra-operative injuries in orthopedics such as fracture repair, bone grafting, vascularized bone microsurgery, intra-medullary plating etc. as well as plastic surgeries.

**Keywords:** Humerus, Nutrient foramina.