

## Macroscopic Anatomy of the Nutrient Foramina of Human Scaphoid Bone

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**Abstract :** Background: Scaphoid bone is commonly fractured among all the bones of the wrist. The fracture can damage the arteries and would cause avascular necrosis of the scaphoid. In this present study, the goal was to study the topography and number of nutrient foramina in the scaphoid bones of South Indian population. Methods: We studied 46 human scaphoid bones, among them 20 were left sided and 26 belonged to the right side. The scaphoid bones were available at the department of anatomy of our institution. The scaphoid bones were macroscopically observed for the topography and number of nutrient foramina. The data was collected, tabulated and analyzed. Results: The nutrient foramina were observed in all the scaphoid bones (100%). The locations of the foramina were over the non-articular surfaces in all these scaphoids. They were distributed over the palmar and dorsal surfaces. The foramina were found proximal as well as distal to the mid waist of the scaphoid bone. Their number ranged between 9 and 54 in each scaphoid bone. The number ranged between 2-24 over the palmar surface and 7-36 over the dorsal surface. They ranged between 2-24 proximal to the waist and 3-39 distal to the waist. Conclusion: The knowledge of arterial supply, topography of nutrient foramen and their number is essential to understand the concepts of avascular necrosis of scaphoid bone. It will be enlightening to understand the non-union of the fracture of waist of the scaphoid. The morphological data is required to the operating hand surgeon. We do believe that the present study has provided additional information about the topography and number of nutrient foramina of the human scaphoid bones.

**Keywords :** avascular necrosis, nutrient foramen, scaphoid, vascular

**Conference Title :** ICMMA 2016 : International Conference on Microscopic and Macroscopic Anatomy

**Conference Location :** Barcelona, Spain

**Conference Dates :** February 15-16, 2016