

Manipal Academy of Higher Education

Impressions@MAHE

Kasturba Medical College, Mangalore Theses
and Dissertations

MAHE Student Work

Spring 5-4-2021

Incidence of accessory brachialis muscle, variations in its insertion and relation with surrounding neurovascular structures

Mamatha Tonse

Follow this and additional works at: <https://impressions.manipal.edu/kmcmr>



Part of the [Medicine and Health Sciences Commons](#)

Incidence of accessory brachialis muscle, variations in its insertion and relation with surrounding neurovascular structures

Mamatha Tonse, Mangala M. Pai, Latha V. Prabhu, B.V. Murlimanju, Lakshmisha Y. Rao

Department of Anatomy, Kasturba Medical College, Mangalore-575001, Manipal Academy of Higher Education, Manipal, Karnataka, India

Summary

Background: Accessory brachialis muscle can compromise the surrounding neurovascular structures due its variable insertion. In this context, the objective of the present study was to determine the incidence of accessory brachialis muscle, variation of its insertion and relation with surrounding neurovascular structures.

Methods: The study was performed in 84 formalin fixed human cadaveric upper limb specimens, which were available in the department of anatomy. The insertion pattern of the accessory brachialis muscle was divided into 5 types as type 1, type 2, type 3a, type 3b and type 4.

Results: Accessory brachialis muscle was observed in 46 (54.8%) cases. In 31 cases (67.4%), the accessory brachialis inserted into the main tendon of brachialis muscle (type 1). It joined the tendon of biceps brachii (type 2) in 6 cases (13%). In 7 cases (15.2%), it gave a slip which joined the supinator muscle after passing deep to the radial recurrent vessels (type 3a). In a single case (2.2%), the slip merged with the supinator after passing superficial to the radial recurrent vessels (type 3b). In one case (2.2%), it gave muscular fibres which crossed the radial nerve and merged with the brachioradialis muscle (type 4).

Conclusions: The morphological knowledge obtained in this study will be enlightening to plastic surgeons and orthopedic surgeons. It will help them to understand the neurovascular compression disorders in the region. The radiologists also should be aware of these muscular variations to avoid the misinterpretation while seeing the images.

Keywords: anatomic variation; pronation; supination