

Streszczenie w języku angielskim

The rotator cuff, also known as the rotator cuff, consists of four muscles of the shoulder girdle: the supraspinatus, infraspinatus, teres minor, and subscapularis. A review of the literature on morphometric measurements of the rotator cuff muscles reveals that, despite the use of various imaging modalities, such as ultrasound, MRI, CT, and autopsy studies in adults, morphometric analysis of these muscles has not yet been performed in human fetuses.

Based on the above, for the first time in the literature this series of publications conduct a morphometric analysis of the rotator cuff muscles using human fetal material. The data presented in this doctoral thesis were based on the results of bilateral measurements of dissected rotator cuff muscles from 36 human fetuses of both sexes. Throughout the fetal material, the supraspinatus, infraspinatus, subscapularis, and teres minor muscles developed typically. Statistical analysis revealed no gender or bilateral differences in any of the parameters examined.

The aim of this study was to expand on the existing knowledge regarding the morphometry of the rotator cuff muscles in human fetuses in terms of their developmental dynamics during the prenatal period. Morphometric data of skeletal muscles provide a wealth of useful information for a thorough assessment of the musculoskeletal system, which has potential implications for treatment in pediatric surgery and neonatology.