

## **Abstract**

**Title:** Anatomical variants of ligamentum tibiotolare anterius shown by sonography in healthy volunteers:descriptive cross-sectional study

**The main objective:** The main goal of the work was to find out if the ligamentum tibiotolare anterius has anatomical variants that can be visualized by ultrasonography in an asymptomatic healthy population. Another goal was to determine the dimensions of the ligament in our observed group and find out if there is a correlation between exercise history, limb dominance and ligament construction.

**Methods:** 25 probands from among students of the 3rd Faculty of Medicine of the Charles University participated in the study. All were gradually examined using high-frequency ultrasonography at the Department of radiology and nuclear medicine 3.LF UK under the supervision of the clinic's experts. All participants were further subjected to a questionnaire survey, which was then compared together with the measured data.

**Resoult:** The study showed that anatomical variants in the structure of the LTTA are relatively common in the general asymptomatic population. We discovered possible correlations with leg domination and gender differences in ligament structure.

**Key words:** medial ankle, ligamentum tibiotolare anterior, ultrasonography, examination, anatomical variants, dominant leg