

## CORRELATIONS OF ANTHROPOMETRIC AND FUNCTIONAL PARAMETERS OF 17–18 YEARS OLD FEMALES

Muzurova L. V., Fomkina O. A., Zaichenko A. A.

V. I. Razumovsky Saratov State Medical University,  
Saratov, Russia  
[oafofomkina@mail.ru](mailto:oafofomkina@mail.ru)

**Material and Methods.** The research showed that in girls 17–18 years old, the body length forms a moderate negative correlation with the Rohrer index ( $r=-0.32$ ).

**Results and Discussion.** Weak, but authentically significant correlations, the body mass forms with the Tanner and Robinson indices ( $r=0.18-0.25$ ). Body mass is connected by a strong positive correlation with the Rohrer index ( $r=0.79$ ), BMI ( $r=0.9$ ); moderate positive — with the Tanner index ( $r=0.39$ ). The circumference of the chest is connected by a moderate positive correlation with the Tanner index ( $r=0.41$ ). The pelvic width is associated with a weak positive, but significantly significant correlation with median and Tanner index ( $r=0.13-0.25$ ). The Rohrer index is associated with a weak negative, but statistically significant correlation with cPAD ( $-0.14$ ). LEL is associated only with weak positive and negative correlations with anthropometric parameters; a significant negative relationship is formed with the Tanner index ( $r=-0.13$ ). The heart rate is associated with a strong positive correlation with the Kerdo index ( $r=0.82$ ) and the Robinson index ( $r=0.88$ ). SMAD is associated with a moderate positive correlation with body length ( $r=0.32$ ), the Robinson index ( $r=0.47$ ); moderate negative — with the Kerdo index ( $r=-0.43$ ); weak positive — with pAD ( $r=-0.25$ ).

**Conclusions.** The Kerdo index is associated with a strong positive correlation with heart rate ( $r=0.82$ ); moderate negative — with mean ( $r=-0.43$ ); moderate positive — with the Robinson index ( $r=0.56$ ). The Robinson index is associated with a strong positive correlation with heart rate ( $r=0.88$ ;  $p<0.05$ ); the mean positive index is the Kerdo index ( $r=0.56$ ); moderate positive — with aver ( $r=0.47$ ), pAd ( $r=0.34$ ); weak positive, but statistically significant — with body length ( $r=0.23$ ).

## HYPERDIAGNOSIS OF ACUTE APPENDICITIS IN FEMALE PATIENTS WITH A REDUCED BODY WEIGHT

Myalin A. N.<sup>1</sup>, Milyutin M. V.<sup>1</sup>, Styrov S. V.<sup>1</sup>,  
Myalina S. A.<sup>1</sup>, Terichev A. E.<sup>2</sup><sup>1</sup> National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), Moscow, Russia; <sup>2</sup> National Research Mordovia State University, Saransk, Russia  
[alexmyalin@mail.ru](mailto:alexmyalin@mail.ru)**Key words:** hyperdiagnosis, body weight, ultrasound

**Background.** Hyperdiagnosis of acute appendicitis is actual to this day. It is known that indications

for appendectomy are such symptoms as local soreness and tension in right iliac region in combination with leukocytosis. Often, patients undergo appendectomy, appendicitis without suffering. Number of unchanged processes removed during operation, and now is 20–30%. One of the reasons for hyperdiagnosis is the hypermobility of the right kidney in girls with a reduced body weight. According to the Russian Target Groups Index of 2011, 18% of girls aged 16–19 have a reduced body weight, and 11% have an age of 20–24 years. When examining such patients, the pain was determined for palpation in the right ileal region 3–4 cm medial to the point of McBurney.

**Aim.** The purpose of the study: to determine the ratio of patients with a moving kidney with preliminary diagnosis of «Acute appendicitis»

**Material and Methods.** We examined 138 patients aged 16–24 years who had reduced body weight with preliminary diagnosis of «Acute appendicitis».

**Results and Discussion.** In 84 patients with careful deep palpation, the lower pole of the right kidney was found medial to the point of McBurney, which was 60.8% in study group. Painful reaction to palpation was also observed. Ultrasound examination further confirmed presence of kidney mobility. Diagnosis «Acute appendicitis» was confirmed only in 23%.

**Conclusions.** When examining girls with reduced body weight, careful deep palpation in the right iliac region should be paid in conjunction with ultrasound examination of the abdominal cavity.

## MORPHOMETRIC STUDY OF THE ARTERIES OF THE POSTERIOR SURFACE OF THE TIBIA

Natsis K.<sup>1</sup>, Totlis T.<sup>1</sup>, Tishukov M.<sup>1</sup>,  
Piagkou M.<sup>2\*</sup><sup>1</sup> Department of Anatomy and Surgical Anatomy, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece; <sup>2</sup> Department of Anatomy, School of Medicine, Faculty of Health Sciences, National and Kapodistrian University of Athens, Greece\* [mapian@med.uoa.gr](mailto:mapian@med.uoa.gr)**Key words:** fibular flap, posterior tibial artery, fibular artery, nutrient fibular artery, popliteal artery, morphometry, variation

**Aim.** The study of the morphometric details of the arteries of the posterior surface of the tibia.

**Material and Methods.** Fifteen Greek adult cadavers (mean age, 81.06 years) were dissected in the popliteal fossa and the posterior surface of the tibia. Popliteal artery (PA), anterior tibial artery, posterior tibial artery (PTA), fibular artery (FA) and nutrient fibular artery (NFA) were identified. The mean length of the fibula, the mean distance between