

### **Литература:**

1. Lutchmaya S. 2nd to 4th digit ratios, fetal testosterone and estradiol/S. Lutchmaya, S. Baron-Cohen, P. Raggatt, R. Knickmeyer, J.T. Manning//Early Hum Dev. – 2004. – Vol.77. – P. 23 -28.
2. Manning J.T. The ratio of 2nd to 4th digit length and performance in skiing/ J.T. Manning// J. of sports med. phys. Fitness. – 2002. – Vol. 42. – P. 446 – 450.
3. Manning J.T. The ratio of 2nd to 4th digit length: A predictor of sperm numbers and concentrations of testosterone, luteinizing hormone and estrogen/ J.T. Manning, D. Scott, J. Wilson, D.I. Lewis-Jones// Hum. Reprod. – 1998. – Vol. 13. – P 300 – 304.
4. Книаг Е.А. Половой диморфизм соотношения второго и четвертого пальцев/Е.А. Книга, К.Л. Троцкая//Мат. науч. –практ. конф. с междун. участием «Актуальные проблемы современной медицины». – Минск. – 2015. – С. 947 – 951.
5. Уздинова О.И. Физиолога-генетическая оценка эффективности двигательной деятельности по прогностически значимому морфометрическому признаку «пальцевой пропорции Manning 2D:4D»/О.И. Уздинова, Д.В. Белова, М.А. Захарова//Теория и практика физической культуры. – 2009. - №2. – С. 30-35.

## **CIRCUMARTERIAL FEMORAL VEIN BIFURCATION. CASE STUDY**

**Secu Gheorghe, Catereniuc Iia**

*Nicolae Testemitanu State University of Medicine and Pharmacy, Chisinau,  
Republic of Moldova  
Human Anatomy Department*

With the development of the diagnostic methods, appears the necessity of knowing not only the human standardized morphology, but as well the multiple variants which can be found in different people, otherwise appears a great probability of misinterpretation of the diagnostic results, prognostic, and even inadequate treatment.

### **Materials and methods**

An anatomical study on five dissected cadavers was carried out and the data were analyzed by comparison with similar studies described in specialty literature.

### **Results and discussions**

As a result of dissection of the anterior region of the thigh an anatomical variant of the femoral vein, named circumarterial

bifurcation around one of the perforating branches of the deep femoral artery, was marked out (fig. 1, fig. 2).

That variant was revealed in two cases of dissection.

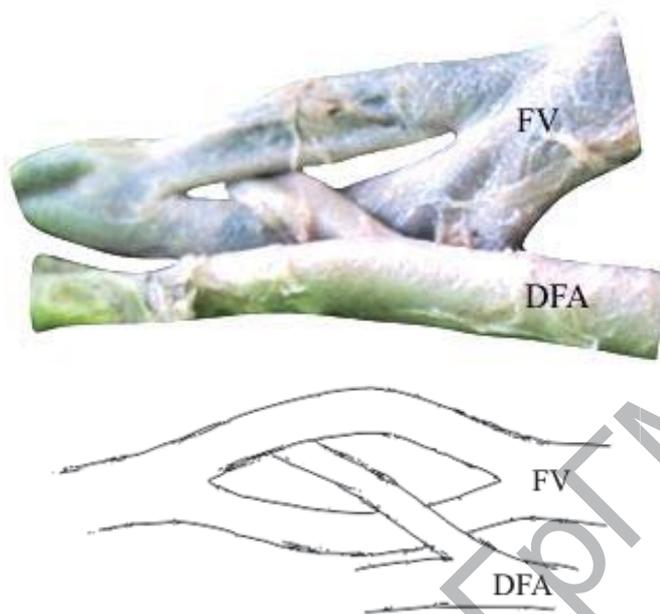


Fig. 1. – The circumarterial bifurcation of the femoral vein. *FV-femoral vein, DFA- Deep femoral artery*



Fig. 2. – Variant of circumarterial bifurcation of femoral vein. *FV-femoral vein, DFA- Deep femoral artery.*

It must be mentioned that a different way of ramification of the deep femoral artery and of the lateral and medial circumflex femoral arteries, were marked out. In one case they had a common trunk (fig. 3) and in another case all 3 arteries had different origin.

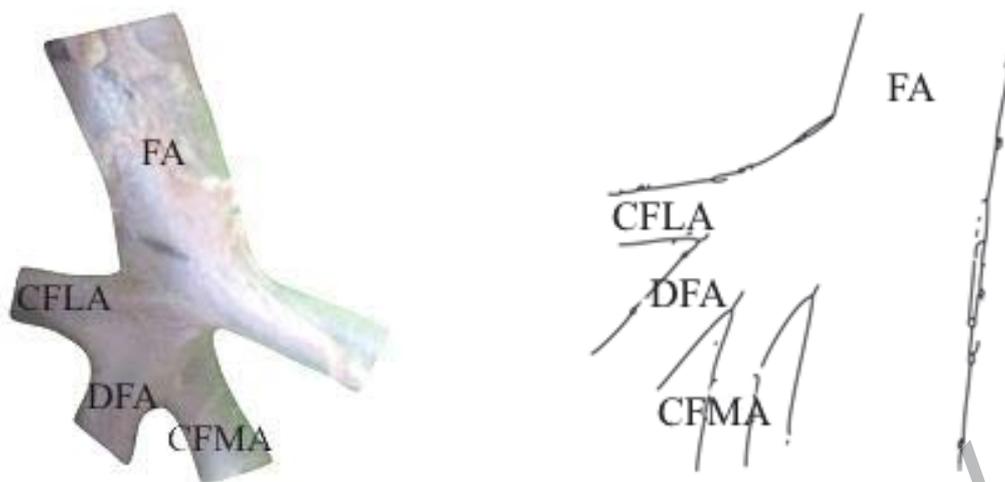


Fig. 3. – Variant of division of the deep femoral artery, of the lateral and medial circumflex femoral arteries. *FA- femoral artery, CFLA- lateral circumflex femoral artery, CFMA- medial circumflex femoral artery, DFA- deep femoral artery.*

It denotes that those variants have an independent development and do not depend only on the genetic factors, but especially on histogenesis conditions.

Another assumption is that the duplication appeared as a compensatory element, more probably, primarily appeared the branch that passes under the artery, and then, the one which passes over the artery, because the arterial pressure is higher in comparison with the venous one, and thus it redirects the venous reflux at that level.

Whatever the nature of that duplication was, it must be pointed out that it is not a rare phenomenon, and statistics given by different scientist regarding incidence of that variant, varies from 6%<sup>[1]</sup> to 20-25% of cases<sup>[2]</sup>.

There was also mentioned that in those cases may appear difficulties in diagnostics of the thrombi at that level by ultrasound and roentgenoscopic methods, also it could be incorrectly suspected a neoformation etc. <sup>[3]</sup>.

On the other hand, morphological variations are distinguished in many cases, and the variation index for the femoral vein is up to 88 %.

Similar cases or similar phenomena could be as well found in other regions of the human body.

In anatomical literature the most often variations at the abdominal level were described, when the left renal vein forms a duplication around the aorta in (11%), or the right renal vein form such a ring in

(15%) that reveals the possibility of collateral circulation at that level in case of certain types of recurrent pulmonary embolism of the lower limbs<sup>[4]</sup>.

Similar results were obtained by other researchers (CM Lee et al., 1992). Among the pelvis variations were described cases when the obturator vein forms a ring around the inferior vesical artery<sup>[5]</sup>.

Even existence of such developmental variants is proved, they are less studied and less taken into account in medicine, although they might have a significant influence both in diagnostics and therapy, especially in surgery.

### **Conclusions**

Knowledge about the described anatomical variant can facilitate the medical decision and provide a more accurate prognosis, however the real cause of development of the venous ring is still not known, as well as its physiological significance in carriers before any pathological changes.

### **References**

1. SCREATON NJ, GILLARD JH, BERMAN LH, KEMP PM. Duplicated superficial femoral veins: a source of error in the sonographic investigation of deep vein thrombosis. *Radiology* [Internet] 1998;206(2):397–401. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/9457192>
2. GORDON AC, WRIGHT I, PUGH ND. Duplication of the superficial femoral vein: recognition with duplex ultrasonography. *Clin Radiol* 1996;51(9):622–4.
3. DACIE JE DS. The value of percutaneous transluminal angioplasty of the profunda femoris artery in threatened limb loss and intermittent claudication. *Clin Radiol* 1991;44:311–6.
4. ABRAMS' CFBAHL. Circumaortic Venous Ring: Incidence and Significance. *Am Roentgen Ray Soc* (132):561–5.
5. ALBAY S, YUZBASIOGLU N, LOUKAS M. Obturator venous ring encompassing the variant origin inferior vesical artery. *Int J Anat Var* 2013;6:56–8.