

We found that the concentration of zinc in the hair of overweight females was lower than that of normal-weight females, as well as in the overweight male group compared to the normal-weight male group. There was a statistical relationship for the level of zinc in the female group at the level of significance $p = 0.02$ compared to the control group, as well as in the group of males at the level of significance $p = 0.05$ compared to the control group.

In the group of overweight males and females, no statistically significant differences were seen when compared with the control group.

This fact attracts attention against the background of an imbalance in mineral metabolism, which leads not only to the development of dysmicroelementoses but also to a violation of metabolic processes.

Table 2 – The concentration of Zinc in blood serum in females and males of the age category > 18 years

Females			p	Males			p
microelement	BMI 18-24.9	BMI 25-29.9		microelement	BMI 18-24.9	BMI 25-29.9	
Blood -Zinc	4.8±0.15	4.75±0.25	=0.07	Blood -Zinc	4.15±0.31	4.44±0.27	=0.07
Hair- Zinc	170.3±2.4	120.5±1.2	=0.02	Hair- Zinc	166.5	141.4	=0.05

Conclusion. In the end, we can say that zinc, a nutrient found throughout the body, helps the immune system and cellular metabolic function. Zinc is included in the composition of 300 enzymes, and thus the deficiency in zinc leads to metabolic disorders and thus weight gain and obesity. Therefore, it is necessary to get rid of zinc deficiency through daily intake within the recommended limits

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ANATOMICAL VARIATIONS IN ORIGIN OF DEEP FEMORAL ARTERY

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Relevance. Exact comprehension and expansive knowledge about the femoral blood vessel fragments is significant during the invasive and angiographic diagnostic procedures. The point of this study is to team up with a couple of studies done about the anatomical variations and original sites of main branch of femoral artery.

Aim. The purpose of the study is to analyse studies from open sources containing information about the anatomy of branches of the femoral artery basin.

Material and method. A sum of 15 articles was included in the review, analysing lower limbs. These articles have addressed a considerable geographical width originating from regions like Asia, America and Europe, covering the most of nations among them.

Results and discussion. Profunda femoris artery (PFA) shows variations in point of origin, cause and its branches. Experting on these clinical variations permits specialists to prevent flap necrosis, particularly tension fasciae latae when used in plastic and reconstructive surgery, in surgical repair of femoral hernias, clinical procedures in the femoral region and in hip joint replacement or preventing severe secondary haemorrhage while performing femoral artery puncture. Absence of information on varieties makes it challenging to deal with inconveniences that can happen during the procedures [1].

PFA begin from CFA as a common trunk with LCFA 10,6% cases and 9.09% from CFA as common trunk with MCFA and exceptionally phenomenal beginning with both of circumflex arteries as trifurcation in 4,54% cases [1]. A cadaveric study illustrated that 90% on the right side and 95% on the left side PFA originate from the common femoral artery (CFA) while 10% (5% on each side) emerge from the CFA as a common trunk with MCFA and 5% dominantly on right side missing [2]. In the meantime exhibit 18% of males (20% on right and 16% on left) and 15% of females (15% on right and 15% on left) have the origin of PFA from CFA as common trunk with MCFA [3].

Not only the point of origin, but also the side of origin contrast in many cases. The majority originate from posterolateral, lateral, posterior sides, while the minority originates from different sides like posteromedial, medial, anteromedial. 53,3%, 18,17%, 10,61%, 3,03%, and 1.51% emerge from posterolateral, lateral, posterior, medial and anteromedial sides respectively [1]. 50% on the right and 70% on the left originate from the posterolateral side. 40% on the right and 10% on the left from posterior side while 5% on the right and 15% on the left from lateral aspect and only 5% cases from posteromedial side. It's absent in 5%, predominantly on the right side [2]. The most regular beginning of PFA are 42% on males and 42,5% on females in posterolateral aspect. 20% on males and 20% on females in lateral aspect. 24% on male and 27,5% on female, in posterior aspect while 14% on male and 10% on female in posteromedial aspect [3]. Although the majority of studies show most regular origination as posterolateral aspect, A.S. Sabnis (2013) studies demonstrate 86% of cases arise from the lateral aspect and 14% of cases arise from the posterolateral aspect. According to a case study by T. Siriporn (2012), 44,6% and 30,8% arise from posterior and posterolateral aspects respectively. While 21,4% from lateral, 12,2% from posteromedial, 3,6% from medial aspect. According to study M.B. Samarawickrama (2009) most of PFA arise from posterior 46%, 30% from posterolateral aspect, 23% from lateral aspect.

Conclusions. In conclusion, we can summarize that the deep femoral artery originates from the common femoral artery in the posterior aspect. The ignoring of these cases will lead to devastating consequences like flap necrosis or iatrogenic injuries during surgeries.

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REFLECTION OF THE PROBLEM OF TREATMENT AND PREVENTION OF MYOCARDIAL INFARCTION IN PATENTS OF THE COUNTRIES OF THE WORLD COMMUNITY

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Relevance. Heart disease is the leading cause of death for people of most racial and ethnic groups in the United States. Each year, about 805,000 people in the United States suffer a myocardial infarction. In this regard, the problem of diagnosis and prevention of myocardial infarction is very relevant. This issue is of particular importance in the context of the ongoing COVID-19 pandemic, as a result of which patients with cardiovascular diseases are at an increased risk of developing severe complications, including myocardial infarction [1]. One of the successful methods of solving the problem is the use of the best achievements of medicine, protected by patents of the countries of the world community. Patent information is unique, timely and credibility.

Aim: to analyze the contribution of inventors from the countries of the world community to the problems of prevention and treatment of myocardial infarction.

Research methods. To achieve this goal, a patent search was carried out in the PATENTSCOPE search engine created by the World Intellectual Property Organization [2]. The depth of the conducted patent search covers the period from August 1980 to December 2022. Search keywords: myocardial infarction, prevention, treatment.

Results and their discussion. As a result of the analysis in the databases for the specified period of time, 1217 patents were identified relating to various aspects of the research problem.