

286. VARIANTS OF FORMATION OF SUPERFICIAL AND DEEP PALMAR ARCS

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Introduction: Our work with title "Desvoltage variants of superficial and deep palmar arcs" was performed at Department Topographic Anatomy and Operative Surgery with scientific coordinator Bedencova O.E.

The objective: To study variants of formation of superficial and deep palmar arcs on cadaveric material.

Materials & Methods: We used surgical instruments: scalpel, tweezers; 10 corpses at the Department Topographic Anatomy and Operative Surgery; camera.

Results: We identified 2 types of superficial arcs (arcus radioulnaris; arcus ulnaris) and 2 types of deep arcs (deep arc formed due anastomosis between the deep palmar branch of the radial artery and the deep branch of the ulnar artery; deep arc formed due anastomosis between the deep palmar branch of the radial artery with the the upper and lower of the deep branch of ulnar artery)

Conclusion: We have been revealed the most common desvoltage variant of arcs - arcus radioulnaris, which consists 20%.

287. THE GENETIC ASPECTS OF HYPERCHOLESTEROLEMIA

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Introduction: Hypercholesterolemia appears when a person swallows a big quantity of cholesterol, or it is synthesised in excess by hepatocytes. A high level of cholesterol increases the cardiovascular risk, and the incidence of myocardial and cerebral stroke. Hypercholesterolemia and overweight are caused by increased saturated fats consumption at persons with genetic idiosyncrasy and are supported by sedentariness. There is a increased production of LDL, and the genetic component is unlikely to be monogenic. The genes which are involved in appearance of hypercholesterolemia are: LDLR gene - protein that encodes LDL receptor on the hepatocytes; APOB gene - is the main component of chylomicrons and LDL, its disorder causes conformational changes of binding with LDL receptor; LDLRAP1 gene – gene that codifies pockets on the hepatocyte's membrane and PCSK9 - controls the number of LDL receptors. The most of all (60-75%) have dose-gene effect. The most common genetic disease that causes hypercholesterolemia is familial hypercholesterolemia, an autosomal dominant

pathology. There are homozygot and heterozygot forms, those homozygot being the most critical, the person don't reach the age of 30. The diagnosis is established only by genetic analyses.

Material and methods: The purpose of this study is to appreciate the correlation between hypercholesterolemia, the apperance of vascular diseases and their connection with family history at 50 persons (19 female and 31 male) with chronic cardiac pathology.

Discussion results: An analysis of the study gives the following results: 58% of patient's relatives suffer from arterial hypertension, 12% suffer from coronarian pathology and other 12% of relatives died of vascular disease. It was observed in the medical history that the number of vascular diseases increases with aging, this is characteristic for atherosclerosis, being caused by hypercholesterolemia. Evaluating the results, the farmacological methods with statins and genic therapy are the most efficient concepts of treatment. The applicability of microorganisms like retroviruses or adenoviruses has a great potential to become a new therapy for genetic diseases.

Conclusion:

1. The genetic verification of cholesterol metabolism is very complicated and involves a lot of genes, but fenotipically the patients have the same characteristics.
2. The molecular diagnosis directs to the increased proportion of patients which begin or intensify the anticholesterol therapy, as a result, decreases the incidence of atherosclerosis at suffering population.
3. The genic therapy is a new method, with a great potential to become a new therapy for treating genetic diseases.

Key words: Hypercholesterolemia, vascular diseases, gene therapy.

288. TOPOGRAPHICAL VARIANTS AND STRUCTURAL PARTICULARITIES OF SPLENIC ARTERY

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Introduction. The splenic vessels, particularly the arteries are important during scheduled and urgent surgical procedures on immunocompetent organs. The problem has grown strongly since the introduction of organ sparing procedures during surgical treatments of diseases and traumas. The exact knowledge of splenic artery topography and its branching patterns is essencial in modern surgery.

Materials and methods. The study was performed on spleens of deceased patients whose cause of death didn't affect the organ and its vascular supply. The topography and branching patterns of splenic artery was studied during anatomical dissection of 18 spleens. Discussion results. The topography of the splenic arteries was studied on different organ complexes. The artery had a sinous course in 11 cases (60,5%) and straight in 7 cases (39,5%). One polar artery in the hilum region was encountered in 6 cases. Two polar arteries were encountered in one case. The splenic artery branched in twoarteries in 6 cases