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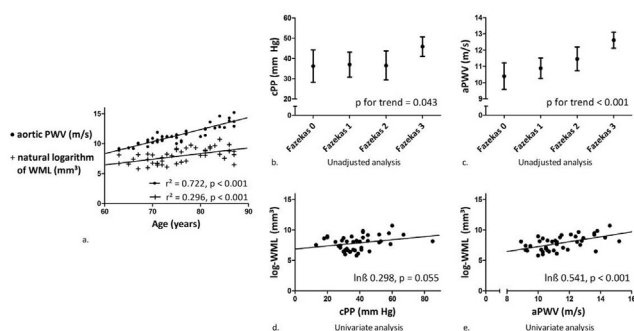
P28: DETERMINANTS OF ARTERIAL STIFFNESS AS MARKER OF EARLY VASCULAR AGING IN PHYSICIANS POPULATION

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Conclusion: Increased pulse pressure and increased aortic stiffness were associated with the severity of WML, assessed with both Fazekas score and a quantitative hyperintensity segmentation method. Age is highly associated with aortic stiffness and cerebral small vessel disease.

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REPLACED RIGHT HEPATIC ARTERY AND INTERLOBAR BRIDGE OF LIVER WITH UNUSUAL ARTERIAL SUPPLY OF IVTH SEGMENT

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A replaced right hepatic artery (rRHA) arising from the superior mesenteric artery and an interlobar parenchymal bridge over the sagittal fissure of liver have been observed on a 64 year old formalin-fixed male cadaver in the anatomy laboratory.

As we followed a detailed segmental anatomy, encountered an arterial distribution on the segment IV featuring a different pattern from the literature so far. According to our observations, the segment I is supplied by both left (LHA) and middle (MHA) hepatic arteries; the segments II and III are supplied by the LHA while the segment IV is supplied by both the MHA and rRHA. The segments V-VIII are supplied only by the rRHA. Our case emphasizes the importance of arterial variations of liver once again in terms of the surgical procedures during the liver transplantation, hepatic tumors, and etc.

Our discussion particularly focuses to the arterial supply of the segment IV and possible complications it may cause during/after the liver operations.

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DETERMINANTS OF ARTERIAL STIFFNESS AS MARKER OF EARLY VASCULAR AGING IN PHYSICIANS POPULATION

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Objective: To analyze determinants of arterial stiffness in physician's population.

Methods: Observational multicenter study of doctor's vascular health conducted in 12 Russian cities (VICTORIA study). Demographics; smoking status; anamnesis of arterial hypertension (AH) with/without therapy, medications, established CV, renal diseases, diabetes mellitus; cholesterol and glucose level were registered. Arterial stiffness and vascular age was assessed using BPLab® device with Vasotens® technology (Petr Telegin Company, Nizhny Novgorod, Russia). Arterial stiffness was defined as an elevation of pulse pressure (PP) > 60 mmHg, PWV > 10 m/s.

Results: 464 individuals were included (247 normotensives (mean age 44 yrs) and 237 with AH (mean age 58 yrs)). Mean PP was 46.0 ± 9.8 mm Hg in normotensive group and 58.6 ± 17.4 mm Hg in group with AH ($p < 0.001$). Mean PWVao was 10.9 ± 2.0 m/s and 12.5 ± 2.5 m/s in groups without and with AH, respectively ($p < 0.001$). PP > 60 mm Hg had 11% subjects without AH and 43% with elevated blood pressure (BP) ($p < 0.001$). PWVao > 10 m/s had 68% of normotensive subjects and 92% of hypertensive patients ($p < 0.001$). PWVao correlated with brachial systolic ($r = 0.42$, $p < 0.05$) and diastolic BP ($r = 0.38$; $p < 0.05$), central systolic ($r = 0.45$, $p < 0.05$) and diastolic BP ($r = 0.41$; $p < 0.05$), age ($r = 0.37$, $p < 0.05$), heart rate ($r = 0.41$, $p < 0.05$). There was association between elevated PWVao and body mass index ($r = 0.39$, $p < 0.05$). In a multiple linear regression model, independent determinants of PWV were systolic BP ($\beta = 0.29$, $p < 0.001$), body mass index ($\beta = 0.19$, $p < 0.001$).

Conclusions: High PWVao measured by BPLab® device with Vasotens® technology is characterized physician's population with and without AH. The main determinants of PWVao are systolic BP and body mass index.

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TOTAL LONGITUDINAL DISPLACEMENT (TL0D) OF THE COMMON CAROTID ARTERY (CCA) DOES NOT DIFFER BETWEEN PATIENTS WITH MODERATE OR HIGH CARDIOVASCULAR RISK (CV) AND PATIENTS AFTER ACUTE MYOCARDIAL INFARCTION (AMI)

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Background: Total longitudinal displacement (tLoD) of the common carotid artery (CCA) wall is a novel ultrasound marker of vascular function that can be evaluated using modified speckle tracking techniques. Decreased CCA tLoD has already been shown to be associated with diabetes and was shown to predict one year cardiovascular outcome in patients with suspected coronary artery disease (CAD). The aim of our study was to evaluate if CCA tLoD differ between patients with moderate or high cardiovascular (CV) risk and patients after recent acute myocardial infarction (AMI).

Methods: 49 patients (54 ± 6 years) with moderate or high CV risk and 42 patients (58 ± 7 years) after recent AMI were included. All patients were non-diabetic. CCA tLoD was evaluated using GE EchoPAC speckle tracking software and expressed as mean of both sides. Data on systolic blood pressure, total and high density lipoprotein (HDL) cholesterol levels, high sensitivity C-reactive protein (hsCRP) level, smoking status and family history of early CV events was evaluated and assessed for association with CCA tLoD.

Results: tLoD of CCA did not differ between patients with moderate or high CV risk and patients with very high CV risk after MI (0.265 ± 0.128 mm vs. 0.237 ± 0.103 mm, $p > 0.05$). Lower tLoD was associated with lower HDL cholesterol levels ($r = 0.211$, $p = 0.04$) and male gender (0.228 ± 0.1 vs. 0.297 ± 0.134 , $p = 0.01$).

Conclusions: tLoD of CCA did not differ between patients with moderate or high CV risk and patients with very high CV risk after AMI. However, lower CCA tLoD was significantly associated with low HDL cholesterol levels and male gender.

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THE ROLE OF NOVEL BIOMARKERS IN ARTERIAL STIFFNESS, AND IN PREDICTING FURTHER VASCULAR EVENTS AFTER TIA AND LACUNAR STROKE

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Objective: To explore the role of biomarkers (hsCRP, sRANKL, PRDX1 and EPO) in arterial stiffness and in predicting further vascular events.

Methods: Patients from the ongoing ASIST study each attended a laboratory visit within fourteen days of their diagnosed TIA or lacunar stroke. Arterial stiffness was calculated using cFPWV (carotid-femoral pulse wave velocity) measured with Complior®Artech, France, and with the CAVI®Fukuda,