women <60 years. Obstructive Atherosclerotic CAD was defined as the presence of stenosis ≥50% in at least one coronary vessel in Coronary Computed Tomography Angiography(CCTA) or coronary angiography, as well as performed percutaneous coronary intervention(PCI) or coronary arteries bypass grafting(CABG). Data of 119 study patients were included in the analysis. The prevalence of premature CAD was compared in different groups according to FH diagnosis. Statistical analysis was performed using R(v. 4.0.4) program package.
Results: Of 119 examined patients 52,1%(n=62) were women and47,9%(n=57) were men.In the study population, premature CAD was diagnosed for 26%(n=31) patients. 21,8%(n=26) of study patients had definite FH diagnosis, 37,8%(n=45) had probable FH, 28,6%(n=34) - possible FH and11,8% (n=14) had unlikely FH diagnosis. Premature CAD was diagnosed to 38,5%(n=10) patients with definite FH, 33,3%(n=15) with probable FH, 14,7%(n=5) with possible FH and 7,1%(n=1) among people with unlikely FH.
Conclusions: Our findings indicate that among individuals with premature CAD there is an opportunity to detect an index case for initiation of cascade FH screening, especially in definite and probable FH cases.

EP389 / #1080, TOPIC: *ASA03 - DYSLIPIDEMIA AND RISK FACTORS / ASA03-05 INHERITED DYSLIPIDEMIAS*, POSTER VIEWING SESSION.
A CASE REPORT OF A YOUNG MAN WITH THREE-VESSEL CORONARY ARTERY DISEASE (3VD) ASSOCIATED WITH FAMILIAL HYPERCHOLESTEROLEMIA (FH)

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Background and Aims : FH is thought to be the most common inherited condition affecting the cardiovascular system and causing serious complications. The aim of this case report is to present a clinical case of a young man with 3VD caused by FH.

Methods: A 33-year-old man presented to the emergency department with the complaint of squeezing chest pain which lasted for 6 hours. The patient underwent biochemical tests, an ECG, a coronary angiography, a chest X-ray, a sonography of the heart and an examination of cardiologist.
Results: In anamnesis the patient revealed that he had a stable angina pectoris for 2 months before this event. Also, he had a positive family history for FH. First time hypercholesterolemia was detected 5 months before this event and Rosuvastatin was prescribed. Blood tests showed elevated troponin (65 ng/l), total cholesterol (5,87 mmol/l), LDL (3,91 mmol/l) levels, an ECG revealed myocardial ischemia. A coronary angiography was performed and the diagnosis of 3VD was made. A coronary arteries bypass grafting surgery was urgently performed and symptoms of angina pectoris relieved. For further hypercholesterolemia treatment Rosuvastatin and Ezetimibe were prescribed. After a few months a diagnosis of FH was confirmed.
Conclusions: The literature review revealed that coronary artery disease typically occurs between the ages of 40 and 45 years in men with FH. This case is unique because of an early onset of FH complications. It indicates that it is very important to early diagnose FH in order to prevent premature cardiovascular events.

EP390 / #1099, TOPIC: *ASA03 - DYSLIPIDEMIA AND RISK FACTORS / ASA03-05 INHERITED DYSLIPIDEMIAS*, POSTER VIEWING SESSION.
PREVALENCE OF PREMATURE CORONARY ARTERY DISEASE (CAD) ACCORDING TO GENETIC FAMILIAL HYPERCHOLESTEROLAEMIA (FH) DIAGNOSIS IN LITHUANIA

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Background and Aims : FH is known to be a predisposing cause of premature CAD. We aimed to determine the distribution of premature CAD according to genetic diagnosis of FH in Lithuania.

Methods: Prospective observational cohort study enrolled patients with clinically diagnosed FH according to Dutch Lipid Clinic Network (DLCN) criteria treated in Vilnius University Hospital Santaros Klinikos during the period of 2016-2021. Premature CAD was defined as occuring in men younger than 55 years and women younger than 60 years. Data of 60 study patients were included in the analysis. Obstructive Atherosclerotic CAD was defined as the presence of stenosis ≥50% in at least one coronary vessel in Coronary Computed Tomography Angiography (CCTA) or coronary angiography, as well as performed percutaneous coronary intervention (PCI) or coronary arteries bypass grafting (CABG). Genetic testing was performed using genomic DNA, which was enzymatically fragmented, and regions of interest were enriched using DNA capture probes. The final indexed libraries were sequenced on an Illumina platform. The prevalence of CAD according to genetic diagnosis of FH was analysed. Statistical analysis was performed using R (v. 4.0.4) program package.
Results: Of 60 examined patients 28,3% (n=17) had the genetic diagnosis of FH and 71,7% (n=43) had no FH mutation. Premature CAD was found in 47% (n=8) patients with genetic diagnosis of FH and in 19% (n=8) with no mutations determined (p=0,049).
Conclusions: Premature CAD was more prevalent among patients with genetically confirmed FH.

EP391 / #1129, TOPIC: *ASA03 - DYSLIPIDEMIA AND RISK FACTORS / ASA03-05 INHERITED DYSLIPIDEMIAS*, POSTER VIEWING SESSION.
DISTRIBUTION OF TOTAL CHOLESTEROL (TC) AND LOW-DENSITY LIPOPROTEIN CHOLESTEROL (LDL-C) BETWEEN GENETICALLY DIAGNOSED FAMILIAL HYPERCHOLESTEROLAEMIA (FH) MEN AND WOMEN IN LITHUANIA

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