Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
atherosclerotic disease constituting the genetic disorder most frequently associated with premature coronary artery disease (CPD). The prevalence and high risk of developing DBS make FH a public health problem, although the majority of FH patients are underdiagnosed and undertreated.

Methods: In collaboration with the Spanish Foundation of Familial Hypercholesterolemia, 30 index cases (IC) were selected from our Vascular Risk Unit with a positive genetic diagnosis for FH and about 3 relatives were selected for each IC to perform a cascade screening with a final participation of 89 subjects.

Results: Eighty-nine subjects were evaluated, of which 52.8% were women, with a mean age of 43.49 years. The 24.7% had hypertension and the 5.6% diabetes. The 15% and 28% were smokers and ex-smokers respectively. The 7.8% (7) had presented AMI. No patient had a history of stroke or peripheral arterial disease. The 86.5% had a diagnosis of hyperlipidemia, only 15.6% knew the diagnosis of Familial Hypercholesterolemia. The 83.1% were taking lipid-lowering treatment. The 32.6% had a coronary arch and 2.24% had tendinous xanthomas. Among the analytical data, the lipid profile was CT 57.85 mmol/L, LDL 36.69 mmol/L, APOB 26.33 mmol/L, lipoprotein(a) 10.27 mmol/L. The 80.9% of the relatives presented a positive genetic study, 75% in the LDLR gene.

Conclusions: FH is underdiagnosed, the implementation of a systematic screening would allow the early detection and reduction of CVD

P352 / #1253, E-POSTERS TOPIC: 3. DYSLIPIDEMIA AND RISK FACTORS / 3.02 EPIDEMIOLOGY OF DYSLIPIDEMIAS, HOW CONTROLLED WERE DYSLIPIDEMIAS IN A YEAR OF PANDEMIC?

E.M.M. Silva 1, J.-J. Li. 1, State Key Laboratory of Cardiovascular Diseases, Fu Wai Hospital, National Center for Cardiovascular Diseases, Chinese Academy of Medical Sciences and Peking Union Medical College, Department Of Dyslipidemia, Beijing, China

Background and Aims: Diabetes mellitus is an independent risk factor for cardiovascular disease. However, there were scarce studies specifically examining the association between diabetes and coronary artery disease (CAD) or cardiovascular outcomes in patients with familial hypercholesterolemia (FH). The aim of our study was to assess the effect of diabetes on the coronary severity and cardiovascular hard endpoints in a heterozygous FH cohort.

Methods: Four hundred and thirty-two patients with HeFH with molecularly and/or clinically Dutch Lipid Clinic Network (DLCN) score ≥ 6 (definite and probable) were selected for this study. Patients were divided into diabetic group (n=99) and non-diabetic group (n=333). Cox regression and Kaplan-Meier analysis were used to evaluate the effect of diabetes on cardiovascular hard endpoints.

Results: The prevalence of CAD was higher in patients with diabetes compared with those without diabetes. Moreover, patients with diabetes suffered from more severe coronary lesions with high tertiaries of Gensini score (high-GS) (p=0.017). During a median of 3.75 years of follow-up, the hard endpoints occurred in 13 of 99 patients with diabetes and in 16 of 333 without diabetes at baseline. In comparison with patients without diabetes, patients with diabetes were at significantly greater risk for hard endpoint (multivariable adjusted HR 2.316, 95% CI 1.019–4.836, p=0.025).

Conclusions: To conclude, our study demonstrated that diabetes is associated with coronary severity and cardiovascular hard endpoints in patients with heterozygous familial hypercholesterolemia.

P354 / #443, E-POSTERS TOPIC: 3. DYSLIPIDEMIA AND RISK FACTORS / 3.02 DIABETES, INSULIN SENSITIVITY AND RESISTANCE, EFFECT OF NMDA-RECEPTORS ANTAGONIST ON SERUM LIPID LEVEL UNDER EXPERIMENTAL HYPERHOMOCYSTEINEMIA IN DIABETIC HAMSTERS

T.O. Briukhanova, L.V. Lytkin. National University of Pharmacy, Biological Chemistry, Kharkiv, Ukraine

Background and Aims: Hyperhomocysteinemia is a common condition in a course of diabetes, obesity, metabolic syndrome and atherosclerosis. It is observed hyperstimulation of pancreatic NMDA-receptors by endogenous glutamate under metabolic disorders which intensifies by another NMDA-agonist homocysteine, that impairs β-cell glucose-dependent insulin secretion. Insulin signal disorders and chronic hyperglycemia provoke atherogenic dyslipidemia. In current study, we have investigated the effect of NMDA-receptor antagonist memantine on lipids level in diabetic hamsters under experimental hyperhomocysteinemia.

Methods: The investigation was carried out on 100 male Syrian hamsters who were kept on fructose- and fat-enriched diet for 9 weeks and for 2 weeks were administrated injections of homocysteine (except negative control). Animals were treated for 14 days: intragastriically administration of memantine (1.2 mg/kg), metformin (62 mg/kg) or combination of medicines. Level of serum lipids (TG, total/LDL/HDL cholesterol) was measured by standard commercial enzyme kits, detected by biochemical analyzer MapLab.

Results: Monotherapy by memantine and metformin did not cause any significant effect on lipid’s level, owing to control pathology multiple mechanisms of pathogenesis. Administration of memantine+metformin combination led to decrease in serum TG level by 24.3%, total cholesterol – by 27.6% and HDL-cholesterol – by 18.9% (p<0.05 against positive control). This was probably due to the drugs synergy realized by pancreatic NMDA-receptors blocking and modulation of glucose-induced insulin secretion.

Conclusions: the results suggested further memantine investigation promise as potential antidiabetic agent.