

Cardiovascular risk assessment in haemophilia patients at University Hospital in Ostrava

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OBJECTIVES

Advances in haemophilia care have led to increase in the life expectancy among persons with haemophilia (PWH), which is now close to a general male population in developed countries. The middle-aged and older PWH must face the same age-related diseases as a general population. Although PWH are relatively protected from cardiovascular death, cardiovascular diseases in this group of patients may become increasingly important in the near future. We evaluated six classical cardiovascular risk factors such as age, hypertension, hyperlipoproteinemia, smoking, diabetes mellitus and overweight in all adult PWH in the Haemophilia Comprehensive Care Centre (HCCC) at the University Hospital in Ostrava, Czech Republic.

METHODS

76 adult PWH are registered in HCCC in Ostrava - 67 patients with haemophilia A (26 with the severe form), 9 patients with haemophilia B (6 with the severe form). During their regular outpatient clinic visit was recorded: age (18-45 years and more than 45 years), hypertension (blood pressure > 140/90 mmHg or using of anti-hypertensives), total cholesterol levels (> 5.0 mmol/l), LDL cholesterol (> 3.0 mmol/l) and triglyceride levels (> 1.7 mmol/l), smoking (yes/ no), diabetes mellitus (fasting glucose levels \geq 7.0 mmol/l or antidiabetic drugs) and overweight and obesity (body mass index (BMI) \geq 25 kg/m² and BMI \geq 30 kg/m²).

Baseline characteristics PWH at University Hospital in Ostrava

	Age		Haemophilia type		Haemophilia severity			HCV +	HIV +	CV disease history
	18 – 45 years	> 45 years	A	B	Mild	Moderate	Severe			
Count	38	38	67	9	34	10	32	26	0	1
[%]	50.0	50.0	88.2	11.8	44.7	13.2	42.1	34.2	0	1.3

Prevalence of cardiovascular risk factors in PWH at University Hospital in Ostrava

Risk factors (RF)	Hypertension	Diabetes mellitus	Hyperlipoproteinemia	Overweigh (obesity)	Smoking	Age > 45 years	Three and more RF	Five or six RF
Haemophilia patients (n = 76)	40.8 %	11.8 %	43.4 %	56.6 % (17.0 %)	25.0 %	50.0 %	39.4 %	13.1 %

RESULTS

Average age of our PWH is 44.8 (median is 42, min. 18 and max. 76), 50.0 % PWH are older 45. Median of BMI is 25.4 kg/m² (min 18.5 kg/m², max 38.5 kg/m²), 56.6 % PWH are overweight and 17 % are obese. Hypertension was detected in 40.8 % PWH, diabetes mellitus in 11.8 %, hyperlipoproteinemia in 43.4 % and 25 % PWH are smokers. 39.4 % PWH have three and more risk factors and 13.1 % PWH have five or six risk factors.

CONCLUSIONS

Comprehensive preventive, diagnostic and therapeutic approach including proactive approach to lowering cardiovascular risk factors is recommended in PWH. Hypertension and diabetes mellitus not only increase the risk of cardiovascular events, but also increase the risk of microvascular disease and cerebral haemorrhage.

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