

CLINICAL, LABORATORY AND METABOLIC CHARACTERISTICS OF ADULT PATIENTS WITH HEMOPHILIA A

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Background and Aims. Hemophilia A is an inherited bleeding disorder caused by factor VIII (FVIII) deficiency and characterized by recurrent bleeding episodes and progressive joint damage. Improved life expectancy resulting from prophylactic treatment has increased the clinical relevance of long-term comorbidities, including metabolic and cardiovascular disorders. This study aimed to evaluate the clinical, laboratory, and metabolic characteristics of patients with hemophilia A compared with healthy controls.

Materials and Methods. 26 male patients with hemophilia A and 66 healthy male blood donors were enrolled. Mean age was 45 years in patients and 44 years in controls. Patients were classified as having mild, moderate, or severe hemophilia according to FVIII activity levels. Clinical records were reviewed to assess age at diagnosis, hemophilic arthropathy, physical activity, dietary habits, infectious history, and metabolic comorbidities. Laboratory evaluation included metabolic, nutritional, inflammatory, and biochemical parameters, together with HBV, HCV, and HIV serology.

Results. 9 patients (35%) had mild hemophilia, 5 (19%) moderate hemophilia, and 12 (46%) severe hemophilia. Severe disease was diagnosed earlier than mild disease. Eleven patients (42%) had a history of HBV and/or HCV infection, most commonly HCV (64%). Hemophilic arthropathy

was among the most frequent complications, predominantly affecting knees, ankles, elbows, and hips. Reduced physical activity was frequently observed, often related to fear of bleeding; only 10 patients reported regular sports participation, mainly younger individuals. Several patients also reported unbalanced dietary habits. Metabolic comorbidities were present in 77% of patients. Dyslipidemia was observed in 35%, isolated hypertension in 12%, diabetes mellitus in 15%, combined dyslipidemia and hypertension in 12%, and combined diabetes and hypertension in 4%; only 23% of patients had no metabolic comorbidities. Compared with controls, patients showed significantly higher glucose and triglyceride levels, particularly those older than 40 years. Ferritin levels were significantly increased, likely reflecting chronic joint damage and recurrent microbleeding, whereas CRP levels did not differ significantly between groups.

Conclusions. In addition to bleeding-related and musculoskeletal complications, patients with hemophilia A exhibit a high prevalence of metabolic abnormalities and cardiovascular risk factors. Reduced physical activity and unhealthy lifestyle habits may contribute to this burden. These findings highlight the importance of a multidisciplinary approach that integrates bleeding prevention with metabolic and cardiovascular risk assessment, lifestyle counseling, and promotion of safe physical activity.