Abstract

**Introduction.** Hemophilia is a hereditary X-linked coagulopathy characterized by a deficiency of FVIII (hemophilia A) or FIX (hemophilia B) that causes hemorrhage depending on the severity of the disease; in cases of severe forms, spontaneous hemorrhage may be life threatening. Localized severe bleeding takes place at the different sites such as articular (ankle, knee, elbow), muscular (iliopsoas, thigh, forearm) and mucous membranes (gums, tongue, rhinorrhea, genitourinary tract). Almost all of the patients with hemophilia (PwH) have a form of arthropathy, most often disabling and deforming, with important static, balance, gripping and walking disorders, marked pain and a significant reduction in quality of life.

**Material and method.** The study includes the patients with hemophilia (PwH) from all over the country, patients taking part constantly and periodically at our rehabilitation programs, a number of them underwent surgical procedures. From January 2017 until July 2019 a number of 19 patients benefited from surgical therapy and postoperative rehabilitation treatment. The patients are between 6 and 65 years of age; 17 patients with hemophilia A, 1 patient with hemophilia B and 1 patient von Willebrand disease patients. The clinical examination includes goniometric measurements, the number of joints with hemarthrosis/arthropathy, number of target joints (> 4 joint bleeding in 6 months), HJHS (Hemophilia Joint Health Score), Functional Independence Score in Hemophilia (FISH score), Visual Analogue Scale (VAS). The patients took part at a complex medical rehabilitation program, under the substitution therapy coordinated by the hematologist, a program consisting of individual kinesiotherapy, hydrotherapy, hydrokinesiotherapy, electrotherapy and massage, the duration of the treatment is between 20 and 40 days. The medical rehabilitation treatment has been associated with psychological counseling sessions and medical education lessons.

**Results.** Following the recovery program, we found a significant improvement in pain relief, increased joint mobility and improved quality of life. We also evaluated musculoskeletal status in these patients, suggesting both the severity and gravity of musculoskeletal impairment and the degree of disability.

**Conclusion.** Hemophilic arthropathy is a severe form of joint disease, in most cases invalidating, which significantly reduces the quality of life of these patients. It is important to emphasize the vital role of rehabilitation treatment that PwH should follow, treatment that relieves pain, improves musculoskeletal function, prepares the patient for future arthroplasty, or recovers the joint/limb function after arthroplasty. Rehabilitation in hemophilia begins with diagnosis and continues throughout life, constantly and sustained, coordinated by a multidisciplinary team composed of a hematologist, rehabilitation physician, physical therapist, masseur and psychologist.