World Federation of Hemophilia
2012 World Congress
Paris, France July 8-12

PRELIMINARY RESULTS OF A PHYSIOTHERAPY PROTOCOL IN THE SECONDARY PROPHYLAXIS OF ADULTS WITH HAEMOPHILA

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Introduction: The global population of adults with hemophilia has a high incidence of haemophilic arthropathy. Arthropathy involving musculoskeletal disorders that lead to functional disability, the most obvious: loss of mobility and strength (Figure 1). Physiotherapy is an essential tool for the treatment and prevention of disability caused by arthropathy.

"Prophylaxis" therapeutic substitution of coagulation factors (Figure 2) on an ongoing basis, it is universally accepted by the scientific community, and is the standard treatment for severe young patients in developed countries with adequate healthcare resources. In adult patients is also recommended, noting the potential benefits associated with reduced bleeding and the development of arthropathy or delay orthopedic surgery procedures.

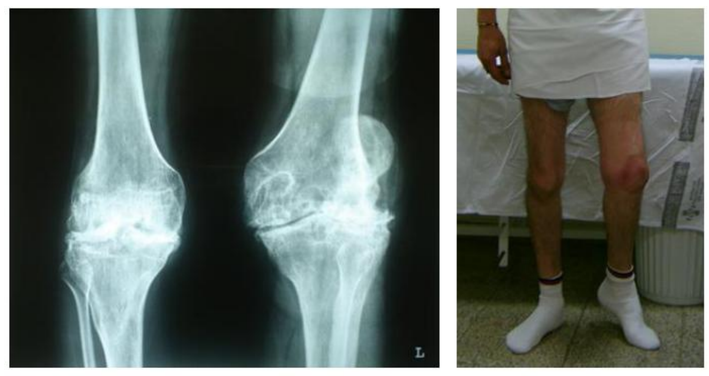

Figure 1

In Haemostasis and Thrombosis Unit of the Hospital La Fe in Valencia, we have developed a study protocol: Incidence and prevalence of musculoskeletal injuries in adults with hemophilia. **The objective of this work is the physical therapy program, combined with replacement therapy factor VIII/IX.**

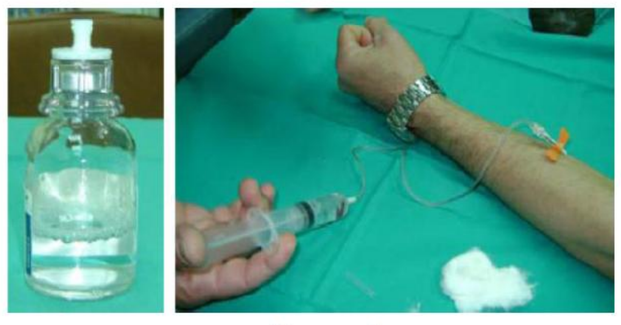

Figure 2

Methods: In 2010-2011, 16 patients with severe hemophilia, mean age 36.6 (range 25-46) were included in "prophylaxis" modality (mean dose 2.500 IU/dl, 2 x week). In all, clinical and imaging was evaluated. In elbows, knees and ankles was measured: 1) Joint volume, 2) Muscle volume, 3) Range of motion (ROM) (Figure 3), 4) Axial alignment, 5) Functional stability, 6) Crepitus, 7) Pain, 8) Muscular balance , 9) Use of orthotics and 10) Gait. In addition to specific controls for each item was valued the impression of functionality (ability to overall physical activity), using a scale from 0 to 100 where 0 represents the inability to use the joint for activities of daily living, and 100 the complete normality.

Active exercise therapy, according to the possibilities of individual resistance, was timed to coincide with hematologic protection offered by prophylaxis. (Figure 4) Evolutionary controls were scheduled at 3, 6 and 12 months.

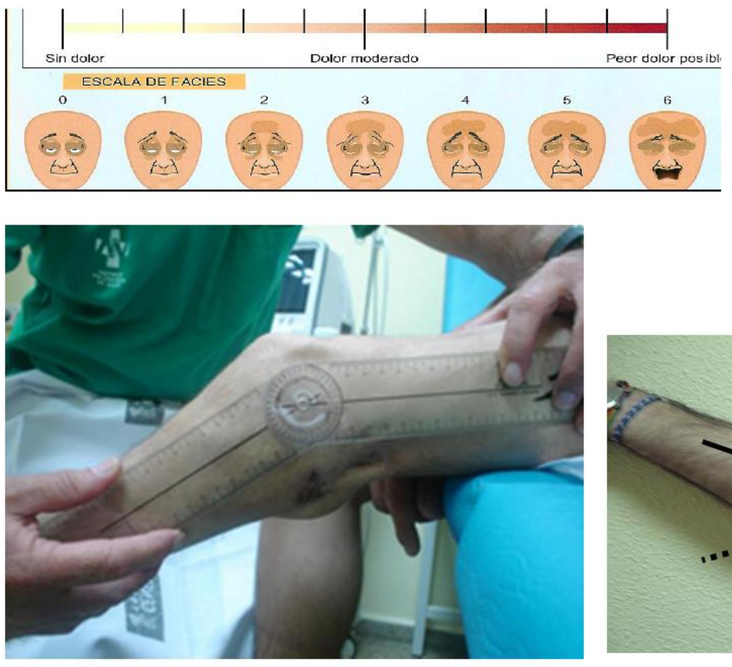

Figure 3

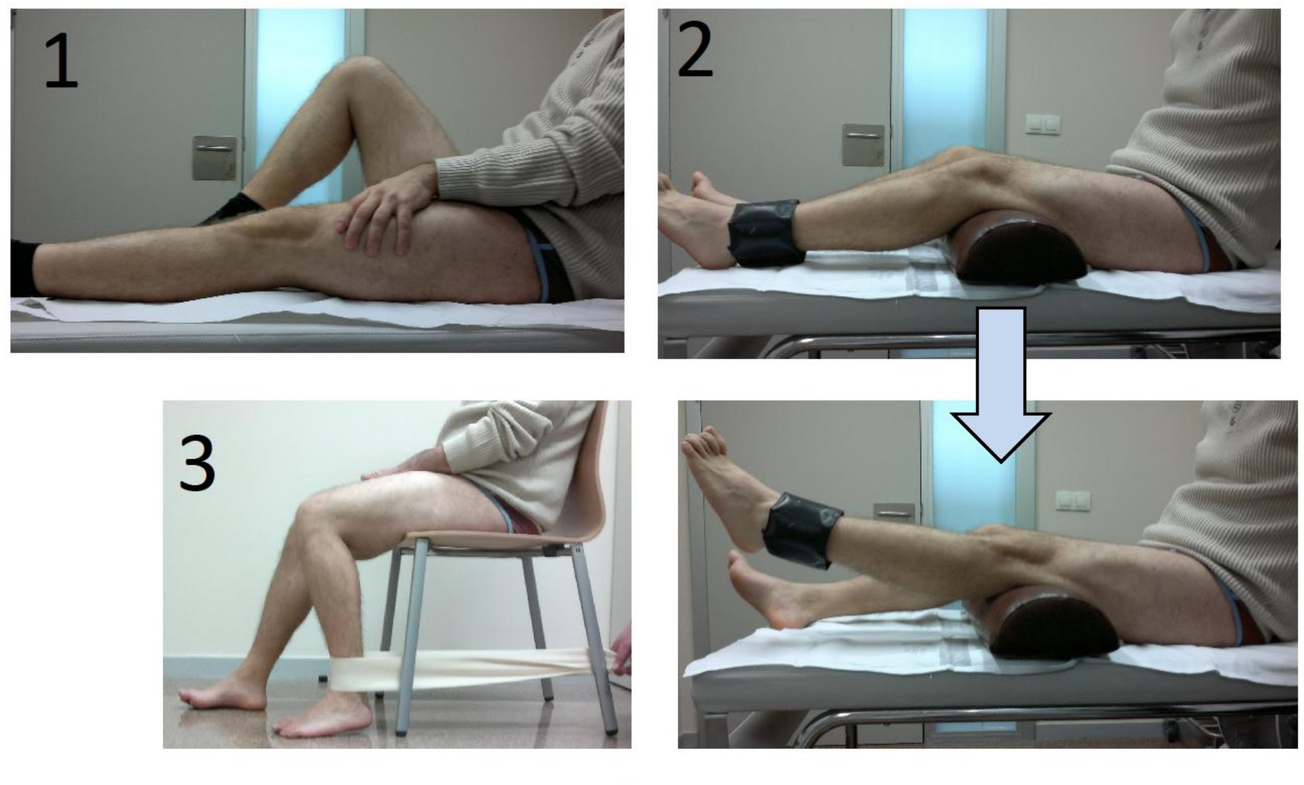

Figure 4

Results: In January 2011, 8 patients have received the 3 planned controls, 3 patients have received controls 1 and 2 patients have received the first control. In 100% of the patients has improved the impression of functional capacity (Figure 5), keeping the target of 0 haemarthrosis in 8 patients, 2 patients had 3 haemarthrosis and 4 patients 1 haemarthrosis.

Objectively, the parameters in which improvement has been obtained are: muscle volume (Figure 6), **ROM, joint pain and gait.**

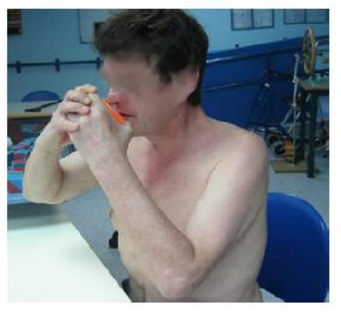

Figure 5

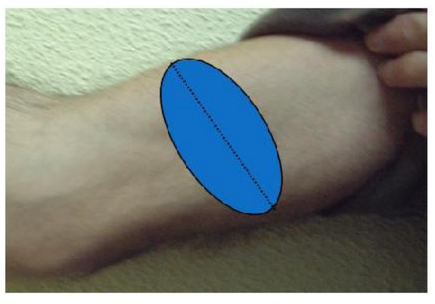

Figure 6

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DOI: 10.3252/pso.eu.WFH2012.2012