

## **Haemophiliac Knee: Role of Physiotherapy**

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**Objective:** To evaluate the outcome of “on demand” factor VIII replacement with physiotherapeutic intervention in the prevention and treatment of recurrent knee hemarthrosis.

**Methods:** Seventeen patients, aged 7-13 years with median age of (10) years, were prospectively included in this study, between June 1996 and June 1999, at King Hussein Medical Center (KHMC). Patients are known cases of moderate to severe haemophilia A, complicated with knee hemarthrosis. All patients received Factor VIII concentrate at dosage of 30- 40 IU/ kg I .V daily for 5 days, followed by physiotherapy (PT) program including the quadriceps strengthening exercise. They were followed up for fifteen months, focusing on function, range of motion (ROM), and number of bleeding episodes in the target joint.

**Results:** Fourteen patients showed significant positive correlation between (ROM) and duration of P.T program ( $r = 0.96$ ,  $p < 0.01$ ). They also showed modest significant negative correlation between the bleeding episodes into the target joint and the duration of therapy ( $r = - 0.55$ ,  $p = 0.04$ ). Two patients were not compliant with PT program and one patient with severe flexion contracture showed poor response to therapy and continued to have frequent bleeding episodes into the target joint, and they were excluded from the study.

**Conclusion:** Prompt “on demand” therapy with F VIII concentrate with quadriceps strengthening exercise will reduce frequency and complications of knee hemarthrosis and allow full recovery of function. So we recommend this therapeutic protocol especially in developing countries where unfortunately giving prophylactic F VIII concentrate is not currently possible.