Joint health in Egyptian children with hemophilia A: what are the affecting factors?

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Background Hemophilia A is an X-linked recessive disorder. Patients experience spontaneous and trauma-induced bleeds. Recurrent joint bleeds lead to progressive disability. Attaining healthy joint is the main goal of hemophilia treatment.

The objective of our study was to evaluate joint health and factors affecting it in hemophilia patients who were on episodic treatment.

Methodology This is a prospective observational study. Hemophilia joint health score was performed on 42 children with severe hemophilia who were selected from pediatric hematology clinics. Factors that may affect hemophilia joint health score were evaluated. These factors were age, age at first joint bleed, frequency of hemarthrosis per year, BMI, parents' level of education, residence, hepatitis C virus infection, performing physiotherapy regularly, and performing conservative measures upon active bleeding (ice, rest, compression, and elevation). Data were analyzed using Statistical Package for Social Sciences. **Results** The mean total joint score was 12.3±7.3. Knee, ankle, and elbow were the target joints in 28.6, 26.2, and 26.2% of patients, respectively. Older patient age, earlier age at first hemarthrosis, and frequent hemarthrosis were associated with higher joint score. Performing physiotherapy was associated with a lower joint score. No significant effects could be elicited as regards other studied factors**. Conclusion** Older patients and those with frequent hemarthrosis were more prone to joint damage. Performing physiotherapy should be encouraged, as it can improve joint health in hemophilia patient.

Keywords: hemophilia, joint health, risk factors