

The perception of pain in children with haemophilia, and its impact on their lives: a case-control study

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Introduction and Objective

Haemophilia is characterized by frequent haematomas and bleeding that cause pain and functional impairment. There are only a few reports evaluating the pain in children. The aim of this study was to assess the perception of pain in a group of haemophiliac children compared with a group of healthy subjects of the same age, and to assess how the pain affected the lives of these young patients

Materials and Methods

Hemophiliac children were included in this study. During planned examinations they were asked to define their pain on that day and to complete a questionnaire about their lifestyle. Pain was assessed by the Wong-Baker Faces Pain Rating Scale (3-8 years) or by the Numerical Pain Rating Scale (9-16 years). The same questions were put to the control group.

Results

18 patients and 27 healthy subjects were evaluated. 94.4% of patients had haemophilia A, 83.4% of which severe. 66.7% were on prophylaxis. 4 patients presented inhibitors, 75% of them were treated with immune-tolerance induction. At the examination 55.6% of patients had pain, in 7/10 caused by haematomas. Five patients in the youngest group reported a mean value of pain intensity of 4.6, lower than the mean (6.6) in older group. In the control group seven children reported pain (25.9%), 5/7 were in the youngest group. In all cases the pain was caused by trauma. In the youngest control group the mean value of pain was higher than in the haemophiliacs (8.7), while in the other one it was similar to cases (7.4). 72.2% of patients practiced sports, of which 75% were swimmers. Due to pain 30% of patients had lost school days (mean 7 days), while 67% of them had to give up physical activity (mean 21 days).

Conclusions

The perception of pain is different among the younger and older hemophiliac children, lower in the former. The younger healthy subjects tended to attribute a double value to pain intensity, compared to the hemophiliacs of the same age. Pain causes a loss both in school days and in physical activity, worsening the quality of life of these patients.

Acknowledgments

Thanks to our young patients and their parents, and to the children of the "Elementary School" of Forni di Sopra – Forni di Sotto (UD- Italy), to their parents and their teachers

Reference

1. Rambod M, Forsyth K, Sharif F, Khair K. Assessment and management of pain in children and adolescents with bleeding disorders: a cross-sectional study from three haemophilia. *Haemophilia*, 2016 Jan;22(1):65-71.
2. Dogan MC, Yazicioglu I, Antmen B. Anxiety and pain during dental treatment among children with haemophilia. *Eur J Paediatr Dent*. 2013 Dec;14(4):284-8
3. Holstein K, Klamroth R, Richards M, Carvalho M, Pérez-Garrido R, Gringeri A; European Haemophilia Therapy Standardization Board. Pain management in patients with haemophilia: a European survey. *Haemophilia*, 2012 Sep;18(5):743-52.
4. Riley RR, Witkop M, Hellman E, Akins S. Assessment and management of pain in haemophilia patients. *Haemophilia*, 2011 Nov;17(6):839-45.
5. Sherry DD. Avoiding the impact of musculoskeletal pain on quality of life in children with hemophilia. *Orthop Nurs*, 2008 Mar-Apr;27(2):103-8