



Annual bleeding rate and factor consumption - comparison between extended and short half-life factor VIII in real life according to electronic documentation smart medication

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Background and Objective

With the introduction of extended half-life factor VIII products (EHL) bleeding rate (BR) and factor consumption (FC) may change in comparison to previous treatment with short half-life factor VIII (SHL).

Methods

Joint bleeds and factor VIII consumption was compared between patients receiving EHL and SHL. Included were patients who received at least 12 weeks EHL concentrates within 12 months before August 2020.

Results

108 patients were treated with EHL with a total number of 12203 entries in their electronic diary. 67 received only EHL (EHL-group), 41 mainly SHL followed by EHL (SHL-group). The schedule of prophylaxis was 2.26 in the EHL and 3.21 in the SHL group ($p < 0.05$). Weekly factor consumption (IE/kg BW) was 73 in the EHL and the SHL group. Relation of FC for prophylaxis vs. bleeding + follow-up was 94/6 in the EHL and 89/11 in the SHL group. Calculated annual joint bleeding rate was 0,81 in the EHL and 2.48 in the SHL group ($p=0.059$).

Conclusion

Patients on EHL documented an approximately twice weekly prophylaxis, compared to nearly three times weekly with SHL. Lower BR and lower FC for bleeding episodes were documented in the EHL group, which was not significant most likely due to small patient numbers. Ongoing real life analysis comparing SHL vs. EHL are required.

