

## Poster Sessions

## 401. Basic Science and Clinical Practice in Blood Transfusion: Poster I

## Replacement Therapy for Minor Surgery and Invasive Procedures in Factor VII Deficiency: The STER Experience

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## Abstract 1262

**Introduction:** Surgical bleeding is among the most frequent symptoms in Factor VII (FVII) deficient patients: in an analysis by our group, post-surgical bleeding was reported in 24% of cases (Mariani G. et al. *Thromb Haemost* 2005;93:481). A recent retrospective study showed a similar prevalence of surgical bleeding (15%) with a significant relation between this type of bleeding, deep hematomas and a FVIIc coagulant activity (FVIIc) of less than 7% (Benlakal F et al. *J Thromb Haemost* 2011;9:1149). Little is known about prevention of bleeding in 'minor surgical interventions', important tools in modern medicine, bearing not a negligible risk of bleeding, as local hemostasis may not always be punctually achieved.

**Aim:** Analysis of Replacement Therapy (RT) for minor surgeries in patients with FVII deficiency, prospectively reported in the Seven treatment Evaluation Registry (STER). Clinicaltrials.gov identifier: NCT01269138.

**Methods:** Analysis of RTs used in 38 minor surgical procedures (34 patients; FVIIc:<1–20%). Minor surgical procedures were defined as suggested by *Kitchens* (Surgery and hemostasis. Textbook of Consultative Hemostasis and Thrombosis. 2007).

Results: Reported interventions included: oral surgery ( $n=15$ ), endoscopic biopsies ( $n=7$ ), catheter insertions ( $n=3$ ), ear-nose-throat and head-neck ( $n=5$ ), mixed type ( $n=8$ ). RT schedules were based on recombinant-activated FVII (rFVIIa;  $n=29$ ), plasma-derived FVII (pdFVII;  $n=8$ ), or Fresh-Frozen-Plasma ( $n=1$ ). One-day RT schedule was employed in 27 procedures, 2–10 days in 11 procedures. Total doses ranged from 7.2–510  $\mu\text{g}/\text{kg}$  (rFVIIa) and 9–300 IU/kg (pdFVII). FFP was given at a total dose of 50 ml/kg (1-day treatment, split into 4 doses of 12.5 ml). Antifibrinolytics were administered together with RT in 16 procedures (11 dental) for a minimum of 1 day to a maximum of 7 days. No bleeding nor thrombotic events occurred; one patient developed an inhibitor

Conclusion: For most of the uncomplicated minor surgery procedures (single dental extractions, catheter insertions, endoscopic biopsies), one-day RT is sufficient with low to medium doses of rFVIIa (median 25  $\mu\text{g}/\text{Kg}/\text{bw}$ ) or pdFVII (median 18.5 UI/Kg/bw), possibly with more than one administration. In complicated and more elaborate interventions, longer-lasting RT schedules and higher doses may be needed.

Disclosures: No relevant conflicts of interest to declare.