**PO43   PLASMINOGEN ACTIVATOR INHIBITOR 1 (PAI-1) DEFICIENCY AND HIP REVISION ARTHROPLASTY: A CASE REPORT**

Débora Costa Marques(1); Francisco Lemos(1); Marta Carvalho(1); Humberto Machado(1)

(1) Centro Hospitalar Universitário do Porto

**Background:** PAI-1 deficiency is a rare disorder with abnormal bleeding associated with injury, trauma or surgery (Haemophilia, 2008, 14:1255-1260). It can be excessive and last longer than usual and, in some cases, it can be life threatening (Current Drug Targets, 2019, 20:1695–1701). The authors present a case report related to PAI-1 deficiency in a patient submitted to a major orthopedic surgery (HIP International, 2018;28:194-199). **Case Report:** 50-year-old woman with known PAI deficiency and hypertension was admitted to the hospital for an elective hip arthroplasty revision surgery due to femoroacetabular conflict. The patient was diagnosed with PAI deficit in 2018 after complaints, since young age, of epistaxis, gum and heavy catamenial bleeding and multiple post-surgical major hemorrhagic complications, such as excessive bleeding, bruises and hemoperitoneum with the need for several blood transfusions, after hip replacement, arthroscopy and myomectomy, respectively. Family history includes mother, father, a twin sister and a brother without any significant bleeding history. A niece, 18 years-old, currently presenting similar symptoms without a diagnose. Six months before the scheduled surgery, the patient went for an anesthesiology appointment for pre-operative evaluation and optimization of an iron deficiency anemia, which required therapeutic intravenous iron. The hematology department was also involved, proving with specific recommendations for prophylactic treatment on the day of the surgery. Before surgery, the patient underwent a specific prophylactic protocol, which included, an intravenous desmopressin infusion during 30 minutes, with 20 mcg (0.3 mcg/Kg) and 1500mg of tranexamic acid, one hour and 30 minutes before the anesthetic procedures began, respectively. Due to the patient’s high risk of bleeding and post-operative pain (revision arthroplasty surgery), the anesthetic staff performed a combined anesthesia (ultrasound- guided suprainguinal fascia iliaca block with 40 ml of ropivacaine 0.375% plus general anesthesia). In addition to standard ASA monitoring, invasive blood pressure with catheterization of the radial artery and non-invasive hemoglobin monitorization was used. During surgery, 1 mg/kg/h of intravenous tranexamic acid was additionally administered, starting 15 minutes before surgical incision and finishing after wound closure. Intraoperative period and post-anesthesia care unit stay were uneventful. Hospital discharged on 3rd postoperative day without hemorrhagic or other complications. The first orthopedic consultation (15th postoperative day) didn ´t identify any complications. **Discussion:**Patients with PAI-1 deficit coagulopathy have an increased risk for hemorrhagic complications in the perioperative period. Pre-operative optimization and a tailor-made anesthetic plan is mandatory in order to exclude/minimize complications and to improve patient safety and outcomes.



**PO4**