

## PO 22 - RECTUS SHEATH HEMATOMA AND AN ELEVATED APTT: HOW TO MANAGE?

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**Abstract:** Rectus sheath hematoma (RSH), associated with blunt abdominal trauma and anticoagulation, is a rare clinical condition due to bleeding into the rectus sheath, after damage to the epigastric arteries or a tear of the muscle. The patient's presentation depends on the size and location of the hematoma. Large hematomas can cause hypovolemia and sometimes can cause urinary tract obstruction and bladder irritability. Invasive haemorrhage control of RSH is considered in hemodynamically unstable patients that don't respond to fluid resuscitation. Measurement of coagulation factors is useful in patients receiving oral anticoagulation because RSH is more likely in supratherapeutic anticoagulation.

**Case Report:** A 80-years-old woman with medical history of hypertension and renal cell cancer was medicated with therapeutic Enoxaparin (60mg two times per day) because of a renal vein thrombosis episode. She came to the Emergency Department (ED) complaining of acute abdominal pain on the right side. She made a CT scan, which showed a RSH with 127x89x100mm dimensions. It was compressing the right ureter and it was causing right ureter-hydronephrosis, bladder lateral deviation and femoral vein compression. A complete blood count showed decreased haemoglobin (Hb 8,6g/L) and an elevated aPTT (257.2s, confirmed in two different blood samples). Plaquettes count, time of prothrombin and fibrinogen were normal. She had no previous history of coagulation disorders. At ED, she became haemodynamically unstable and confuse, and an invasive haemorrhage control was decided. It was performed balanced general anaesthesia with orotraqueal intubation. After massive intraoperative bleeding, 2500 mL of crystalloid fluid, 4 units of red blood cells (RBCs), 4 units of fresh frozen plasma (FFP), 1 plaquettes pool and 1 g of tranexamic acid were administered. The total amount of bleeding was 3000mL. The hypovolemia and the coagulopathy were managed. After the surgery, she was kept intubated and then, admitted at postanaesthetic care unit (PACU). At postoperative day 1, she was extubated and aPTT was 43,6s.

**Discussion:** There are several possible causes of the RSH, such as abdominal surgery, trauma, anticoagulant therapy, and haematological disease. In the present case, the patient was anticoagulated with subcutaneous Enoxaparin and she had an important increase of aPTT value. This combined situation contributes to the haemorrhagic tendency and to the continuous bleeding into the rectus sheath.

**Conclusion:** Nowadays, lots of patients are using anticoagulation, causing important disruptions in coagulation homeostasis. It is an indisputable predisposing factor for RSH and probably the

most common one. In patients receiving anticoagulants, haemorrhage volume is increased, thus resulting in increased mortality.



