**The role of apixaban in the treatment of heparin induced thrombocytopenia (HIT)**

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Objective:

-the efficacy of transitioning to apixaban after argatroban infusion in HIT

Through our case we highlight the efficacy of using apixaban in HIT. An 82-year-old female presented to the emergency department with chest and left leg pain. Her past medical history included hypertension, CKD stage III and chronic thrombocytopenia, platelet count of 160, 000 uL. Her physical examination was unremarkable. Laboratory tests showed platelet count of 43, 000 uL, creatinine of 1.56 mg/dL, and GFR 32 mL/min/1.73m2. Lower extremities ultrasound showed DVT extending from the distal left superficial femoral vein to the left calf. CT scan chest revealed thrombi in the distal main right and left pulmonary arteries, signifying a moderate clot burden. Heparin bolus (5, 100 U) was given followed by the heparin drip. On day 3, the platelet count was 117, 000 uL and warfarin was started. On day 6, heparin drip was discontinued, as the INR was therapeutic. On day 7, INR was 6.7, platelet count 47, 000 uL and she developed ischemia of her left 2nd toe. Warfarin was held. 4T score was 7. The anti-platelet factor 4 was positive, 3.559 with OD <0.400, and heparin-induced platelet aggregation assay was positive, suggesting HIT. Hence, agatroban drip was started. On the agatroban drip her platelet count ranged from 39, 000 uL to 104, 000 uL and then became stable around 82, 000 uL. Since, the platelet count remained at 88, 0000 uL for approx. 3 weeks on the agatroban drip, it was decided to switch her to apixaban. Her platelet count slowly increased to 95, 000 uL in 3 days and she was discharged home on apixaban. Hence, off label use of apixaban should be considered in patients not responsive to argatroban. Currently, we are awaiting for the results of the ongoing clinical trials for the safety and efficacy of novel oral anticoagulants in HIT.