Reactions 1894, p145 - 19 Feb 2022

Enoxaparin sodium

Postoperative fever: case report

A 50-year-old man developed postoperative fever during prophylactic anticoagulant therapy with enoxaparin sodium.

The man presented to the emergency department after falling off a motorcycle and sustaining a left tibial plateau fracture. He underwent an external fixation followed 4 days later by an open reduction with internal fixation (ORIF) of both medial and lateral condyles. Initially, he fevered up to 38.9°C, 3 days after the external fixation, which resolved with paracetamol. After ORIF, he again developed fever (38–38.9°C).

Therefore, the man was treated with paracetamol. However, at this time, he continued to have persistent fever. On postoperative (POD) 5, he was found to have diaphoresis, urinary frequency and occasional productive cough with clear sputum. Other vital signs (excluding body temperature) were stable throughout the admission. Subsequent examination showed mild leukocytosis. Preoperative and postoperative COVID-19 tests were negative. On POD 6, lactate level was mildly elevated, but down-trended the following day. In addition, CRP was elevated. Blood and urine cultures were collected before he started receiving empiric ceftriaxone and vancomycin. D-dimer was mildly elevated. Blood and urine cultures were persistently negative after 48 hours. Thus, ceftriaxone and vancomycin were discontinued. On POD 6, paracetamol was discontinued. Subsequent review of the medications revealed fever onset after the initial administration cyclobenzaprine and prophylactic anticoagulant enoxaparin sodium [enoxaparin; dosage and route not stated]. On POD 7, cyclobenzaprine was discontinued and vital signs were monitored for 24 hours; however, he continued to be febrile. On POD 8, enoxaparin sodium was stopped. His temperature decreased throughout that afternoon and overnight. Therefore, he was diagnosed with enoxaparin sodium-induced postoperative fever. On further questioning, it was discovered that he had a mild food allergy to pork products with diarrhoea, likely a contributing cause of the acute onset fevers. After the resolution of fever, he was deemed medically and surgically stable for discharge with close outpatient follow-up. He was educated about the porcine-derived composition of enoxaparin sodium and to avoid future consumption of all porcine derivatives with concern for additional allergyrelated complications. Since his CHA₂DS₂-VASc score was 1 and he was in normal sinus rhythm throughout the admission, he was discharged on aspirin as directed by the primary orthopaedic team. At his 2 week follow-up appointment, he reported no additional fevers and his wounds continued to heal appropriately [duration of treatment to reaction onset not stated].

Gosnell H, et al. Postoperative fever secondary to enoxaparin usage with pork allergy. BMJ Case Reports 15: No. 1, 2022. Available from: URL: http://doi.org/10.1136/bcr-2021-246904

S