

Thrombocytopenia post revision total hip replacement surgery: Unexpected diagnosis of severe dengue (A case report)

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ABSTRACT

Introduction: Clinical manifestations of dengue fever vary from asymptomatic to severe plasma leakage, severe haemorrhage and organ impairment. These changes can result in severe complications, especially in post-operative patients. **Case Description:** A 47-year-old man was electively admitted for revision of right total hip replacement for ceramic liner dissociation. Pre-operative blood investigations showed haemoglobin (Hb) 12.4 g/dL; haematocrit (HCT) 37.1%; platelet (Plt) 158000/ μ L, white cell count (WCC) 4.4×10^3 / μ L and normal coagulation profile. Surgery was done under general anaesthesia. He was haemodynamically stable until day 3 post-operatively when he developed hypotension and respiratory distress. Blood investigation revealed a drop in Hb to 8.6 g/dL; HCT to 26%, and Plt of 54000/ μ L. Only on post-operative day 4, dengue serology (ELISA method) was sent. NS1 antigen and IgM were both positive. He was referred to the Intensive Care team, treated as severe dengue in critical phase. Dengue PCR reported DEN IV infection. In ICU, he received a targeted fluid regime and oxygen supplementation. Haemoglobin level was persistently low which required multiple blood transfusions. Postoperative day 7, a CT abdomen and pelvis was done which showed a hematoma at right gluteal and upper thigh with no active bleeding. General condition improved and blood parameters normalized after that. He was discharged day 22 post-surgery. **Discussion:** Diagnosing dengue fever in a postoperative patient is challenging. Signs and symptoms of dengue are nonspecific. Dengue typically follows 3 phases: febrile, critical, and convalescent. In this reported case, the patient had no obvious symptoms. A drop in haemoglobin and platelet counts after surgery can be multifactorial in causation. High degree of suspicion of dengue is important, especially in an endemic area like Malaysia