Thrombocytosis induced by rivaroxaban

Yuan Yuan, Li Jianjun, Chen Siyuan, Du Liangjie (Department of Spinal and Neuronal Functional Reconstruction, Beijing Bosi Biomedical Research Center, Faculty of Rehabilitation of Capital Medical University, Beijing 100068, China)

ABSTRACT A 16-year-old boy was undergone a surgery for thoracolumbar vertebral fracture. After operation, he received rivaroxaban 10 mg once daily. His platelet count was 230 × 10^9/L before drug administration. However, eight days later, his platelet count increased to 713 × 10^9/L. Rivaroxaban was discontinued and changed to SC nadroparin calcium 4 100 IU every 12 hours. His platelet count decreased gradually. Nineteen days later, his platelet count was 284 × 10^9/L.

KEY WORDS rivaroxaban; adverse reactions; thrombocytosis

Discussion

This is a case of a 16-year-old boy who underwent a surgery for thoracolumbar vertebral fracture. After surgery, he received rivaroxaban 10 mg once daily. The platelet count was 230 × 10^9/L before the drug was administered. However, eight days later, the platelet count increased to 713 × 10^9/L. Rivaroxaban was discontinued and changed to SC nadroparin calcium 4 100 IU every 12 hours. His platelet count decreased gradually. Nineteen days later, his platelet count was 284 × 10^9/L. This case demonstrates the potential for rivaroxaban to induce thrombocytosis, which is a rare but known adverse effect of the drug. Further studies are needed to understand the mechanisms behind this phenomenon and to develop strategies to prevent or mitigate it.