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LETTER TO THE EDITOR

Inadvertent bleeding in an infant after inguinal hernioplasty leads to diagnosis of hemophilia B

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To the Editor:

A seven-month-old male infant who was diagnosed with inguinal hernia at routine medical checkup was admitted to our hospital for surgical repair. Past history and family history were negative for bleeding tendencies, purpura, and hemophilia. Preoperative physical examination and laboratory tests indicated no abnormalities. Coagulation tests were not performed.

Hernioplasty was performed with no oozing or complications. The patient was discharged from the operating room at 4 p.m. At 7 a.m. on postoperative day (POD) 1, HR had increased to 132 bpm and BP decreased to 90/40 mmHg. The mother noticed blood contamination of the gauze covering the wound at night, but she did not inform the medical staff. At 9 a.m. on POD1, the attending surgeon noticed the patient to be extremely pale and that the gauze covering the wound was soaked with blood. Blood tests confirmed severe anemia (hemoglobin (Hb) 4.8 g/dl). Emergency hemostasis was performed immediately under general anesthesia. After failure to secure another peripheral venous access, we inserted a central venous catheter in the right internal jugular vein. Preparation of red cell concentrate (RCC) took a long time because blood type screening had not been conducted preoperatively. The coagulation tests showed long APTT (125 s), and thus fresh frozen plasma was transfused. Oozing was observed throughout the surgical field. The blood loss measured intraoperatively was 50 g and laboratory tests at the end of surgery showed Hb 8.9 g/dl, and Ht 26.4% after transfusion of two units of RCC. On POD2, the scrotum began to swell because of oozing which required removal of the stitches to reduce the pressure. On POD6, plasma clotting factor IX was reduced to 8% of the normal value, and he was diagnosed as hemophilia B. Therefore, clotting factor IX was transfused which resulted in complete cessation of oozing on POD11. The patient was discharged on POD26.

Routine preoperative management does not include coagulation tests, especially before minor pediatric surgery, for example hernioplasty, for children with no family history of bleeding disorders. Routine use of coagulation tests have been discussed by otorhinolaryngologists who perform elective tonsillectomy and adenoidectomy. Houry et al. [1] and the American Academy of Otolaryngology Head Neck Surgery [2] recommended performing preoperative hemostatic screening tests only for patients with abnormal bleeding history. The reported negative predictive value of normal APTT in the absence of symptoms and

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negative family history is from 80% to more than 95%, and the positive predictive value of a prolonged APTT in the presence of both clinical symptoms and family history is 49–62% [3, 4]. Jonnavithula et al. [5] reported that congenital factor X deficiency can be detected by routine preoperative coagulation screening.

We report this case to emphasize that clinical features and family history do not sufficiently exclude coagulation disorders. Caudal anesthesia, which is contraindicated in patients with bleeding tendency, is commonly used in pediatric hernioplasty. The lack of the coagulation tests requires careful monitoring of the patient's appearance, wound gauze, and vital signs during the postoperative period.

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