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Case Report

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Acquired Hemophilia Developing After Whipple Operation

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ABSTRACT

Acquired hemophilia A (AHA) is a rare bleeding disorder. It is caused by autoantibodies produced against endogenous coagulation factors, without a family history of hemophilia. The incidence has been reported as 1.4 per million. The patients we see in the clinic are similar to those with hemophilia A and have a serious risk of bleeding, especially soft tissue, gastrointestinal, or mucocutaneous bleeding. The most important complication in hemophilia A cases is inhibitor development. Bypassing agents are the first choice in the treatment of AHA. In this case report, we present a patient who developed AHA after periampullary surgery.

Keywords: Acquired hemophilia, postoperative period, pancreaticoduodenectomy

Introduction

Acquired hemophilia A (AHA) is a rare bleeding disorder. It is caused by autoantibodies produced against endogenous coagulation factors [most commonly against factor VIII (FVIII)] without a family history of hemophilia [1]. The incidence has been reported as 1.4 per million. Typically, autoantibodies show a biphasic distribution, with peaks at 20-30 years of age, due to the effect of postpartum inhibitors, and at 68-80 years of age. Eighty-five percent of the patients are over 60 years of age, and age is associated with poor prognosis. It is observed equally in both sexes, except for a higher prevalence in females due to the effect of pregnancy between the ages of 20-40 [2]. The patients we see in the clinic are similar to hemophilia A and have a serious risk of bleeding, especially soft tissue, gastrointestinal or mucocutaneous bleeding. Hemarthrosis-type hemorrhages seen in hemophilia are not common [3]. Mortality in AHA varies between 9.7% and 33%. It causes varying levels of prolonged activated partial thromboplastin time (aPTT), which does not improve with normal plasma addition. In this study, we presented a rare case of AHA diagnosed in a patient who developed soft tissue bleeding two weeks after undergoing the Whipple procedure for a periampullary tumor.

Case Report

A 72-year-old male patient presented to our clinic with the complaints of loss of appetite and jaundice. The patient underwent distal subtotal gastrectomy due to gastric ulcer 42 years ago, and total gastrectomy (remnant gastric Ca) due to gastric cancer 13 years ago. There was no bleeding disorder in his history. There was jaundice throughout the body. Laboratory findings revealed obstructive jaundice, and imaging revealed dilated intrahepatic bile ducts in both lobes. The common bile duct was wider than normal, and a mass was observed at its distal end. Pre-operative coagulation tests were normal. In addition, admission hemoglobin was 7.5 g/dL. The patient who underwent the Whipple procedure developed an unexplained bleeding halfway through the surgery, which lasted 4 hours. After his bleeding was controlled, erythrocyte replacement and fresh frozen plasma replacement were performed in the perioperative period. Moreover, vitamin K and tranexamic acid were administered. No bleeding findings were observed in the patient followed up in the postoperative intensive care unit. A hematoma that started in the inguinal region on postoperative day 14 and gradually spread to the scrotum was observed (Figure 1). Despite replacing two units of packed red blood cells and fresh frozen plasma daily for three days, hemoglobin levels continued to decline, and hematoma persisted. After consulting

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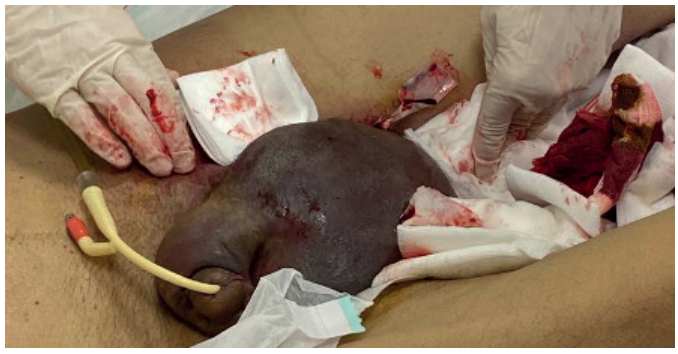

Figure 1. A hematoma that started in the inguinal region on postoperative day 14 and gradually spread to the scrotum

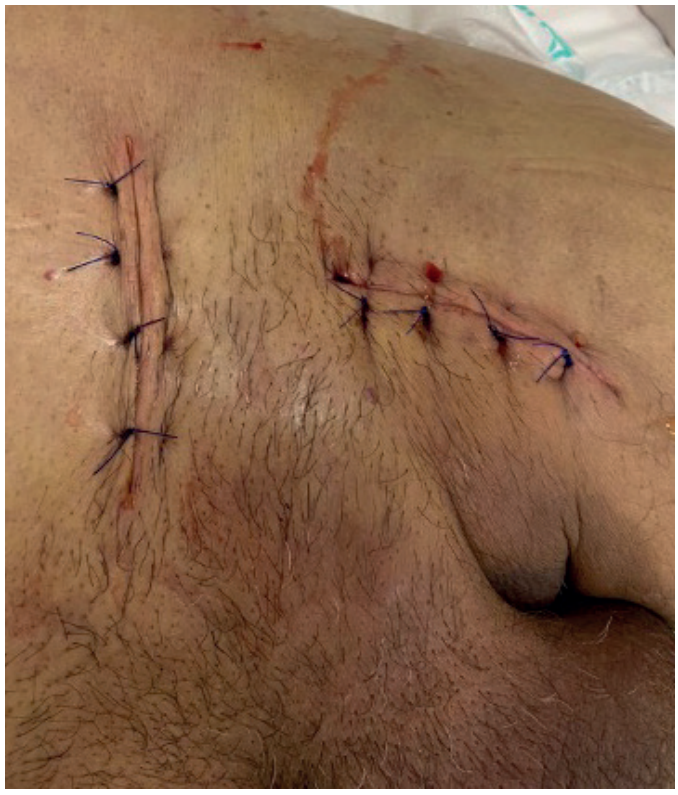

Figure 2. Drained image of a hematoma in the inguinal region

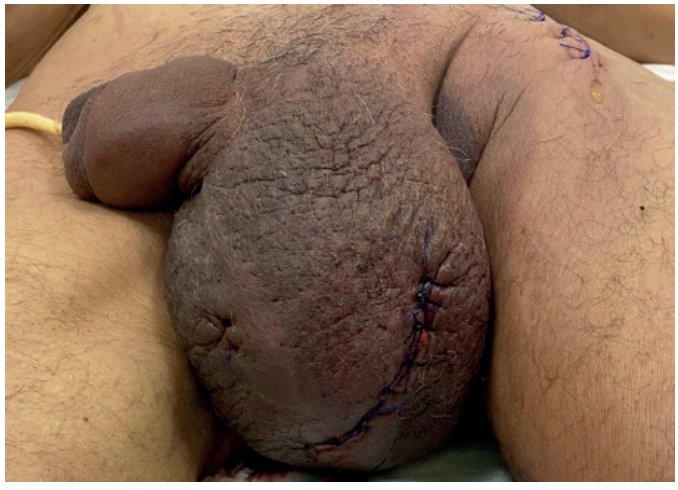

Figure 3. Drained hematoma in the scrotum

a cardiovascular surgeon, the medical team linked a blood gas sample taken from the femoral vein or artery to hematoma. The patient was taken to surgery in collaboration with the cardiovascular surgery department. The femoral vein and the artery were dissected. However, no active bleeding focus was detected. In the same session, the hematoma in the inguinal region and the scrotum was drained. The wound lips were left open, and a perineal drain was placed (Figure 2). During our follow-up, bleeding and a decrease in hemoglobin levels continued. In the patient, who was referred to hematology, the bleeding profile was evaluated. In the coagulation tests, aPTT was found to be prolonged. No improvement was detected in aPTT with the mixing test. Acquired hemophilia was thought to be a rare condition. Recombinant VIIa (activated eptacog alfa) at a dose of 90 mcg/kg was initiated and continued until hemostasis control was achieved. No active bleeding was observed 6 hours following the treatment. No decrease was observed in hemoglobin during the hemogram follow-up. Methylprednisolone was initiated at a dose of 1 mg/kg/day. The patient was discharged with steroid treatment (Figure 2, 3).

Discussion

AHA is a rare bleeding disorder. It is caused by autoantibodies produced against endogenous coagulation factors, most commonly against FVIII, in the absence of a family history of hemophilia. Isolated and long-term aPTT is often the first clue, and recognition of this feature is the key to the diagnosis of AHA [4]. Mixing normal pooled plasma with the patient's plasma by a 1:1 ratio and finding no improvement in aPTT values suggests the presence of an inhibitor. The patients we see in the clinic are similar to hemophilia A and have a serious risk of bleeding, especially soft tissue, gastrointestinal or mucocutaneous bleeding. Most of the cases are idiopathic (50%), while the remainder is associated with malignancy, autoimmune disorders, or seen in the postpartum period [5]. The mortality rate is approximately 7.9-22%, and these patients die within one week after the first symptoms develop [6-8]. The definitive treatment of AHA involves the destruction of the autoantibody through immunosuppression; however, since patients are at risk of severe and fatal bleeding (mortality rate 9-22% in case series), hemostatic treatment is required to treat the bleeding until eradication therapy is successful. The most commonly used treatment strategy achieves complete remission in approximately 70-80% of the patients, consists of steroids and cyclophosphamide [9]. For hemostatic treatment, rFVIIa or plasma derivatives (APCC) from bypassing agents should be used as the first-line therapy [10]. In case 1, bleeding was limited to the soft tissue. In our case, there was coexistence with malignancy.

Conclusion

AHA is a rare disease, but it should be considered in cases of any sudden, unexpected bleeding of any location or severity following surgery, especially, if aPTT is elevated and does not improve with the mixing test.

Ethics

Informed Consent: The consent form was filled out by the participant.

Footnotes

Authorship Contributions

Surgical and Medical Practices: N.A., İ.H., Concept: İ.H., Design: İ.H., Data Collection or Processing: N.A., Analysis or Interpretation: N.A., Literature Search: N.A., Writing: N.A., İ.H.

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References

1. Kruse-Jarres R, Kempton CL, Baudo F, et al. Acquired hemophilia A: updated review of evidence and treatment guidance. Am J Hematol. 2017;927:695-705.
2. Franchini M, Targher G, Montagnana M, Lippi G. Laboratory, clinical and therapeutic aspects of acquired hemophilia A. Clin Chim Acta. 2008;395:14-18.
3. Collins P, Macartney N, Davies R, Lees S, Giddings J, Majer R. A population based, unselected, consecutive cohort of patients with acquired haemophilia A. Br J Haematol. 2004;124:86-90.
4. Dolan G, Benson G, Bowyer A, et al. Principles of care for acquired hemophilia. Eur J Haematol. 2021;106:762-773.
5. Collins P, Hirsch S, Baglin TP, et al. Acquired hemophilia A in the United Kingdom: a 2-year national surveillance study by the United Kingdom Haemophilia Centre Doctors' Organisation. Blood. 2007;109:1870-1877.
6. Bitting RL, Bent S, Li Y, Kohlwes J. The prognosis and treatment of acquired hemophilia: a systematic review and meta-analysis. Blood Coagul Fibrinolysis. 2009;20:517-523.
7. Franchini M, Gandini G, Di Paolantonio T, Mariani G. Acquired hemophilia A: a concise review. Am J Hematol. 2005;80:55-63.
8. Delgado J, Jimenez-Yuste V, Hernandez-Navarro F, Villar A. Acquired haemophilia: review and meta-analysis focused on therapy and prognostic factors. Br J Haematol. 2003;121:21-35.
9. Franchini M, Castaman G, Coppola A, et al. Acquired inhibitors of clotting factors: AICE recommendations for diagnosis and management. Blood Transfus. 2015;13:498-513.
10. Franchini M, Vaglio S, Marano G, et al. Acquired hemophilia A: a review of recent data and new therapeutic options. Hematology. 2017;22:514-520.