

A Case Report of Intraoperative Coagulopathy Secondary to Chronic naphthoquinone Deficiency

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Abstract

Dietary antihemorrhagic factor may be a well-known associate degreedi-hemorrhagic agent that plays an integral role within the natural process pathway. antihemorrhagic factor is concerned in synthesis of natural process factors; II, VII, IX and factor X. antihemorrhagic factor deficiency results in hemorrhage predisposition. Hemorrhages typically gift in deep soft tissue, instead of membrane or animal tissue membranes, hemorrhage that's typically caused by disorders of platelets. Major causes of antihemorrhagic factor deficiency include; medications and diseases involving metastasis with a resultant fat absorption. decoagulant and Cephalosporins area unit one in all the ordinarily prescribed medications that cause antihemorrhagic factor deficiency. sickness touching metastasis pathway, such as; diseases of the duct gland (cystic fibrosis), short gut syndrome and bound pathologies of the biliary tree. antihemorrhagic factor deficiency is additional common in newborns. In adults it's uncommon due to its present nature and also the abundance of its sources. hurt disorders in adults because of antihemorrhagic factor deficiency don't seem to be ordinarily encountered in follow. we have a tendency to area unit presenting a case of associate degree adult World Health Organization conferred with a compartment syndrome secondary to a traumatic contractile organ hemorrhage. Our case highlights the importance of considering antihemorrhagic factor deficiency within the medical diagnosis of unexplained hemorrhages ensuing from a coagulopathy.

Keywords

antihemorrhagic factor deficiency, adult, coagulopathy

Introduction

Dietary naphthoquinone{fat-soluble vitamin} may be a well-known associate degreedi-hemorrhagic factor that plays an integral role within the natural process pathway. Its major role within the natural process pathway is as a molecule for gamma-glutamyl carboxylase, that is critical for the activation of natural process factors VII, IX, X, and coagulation factor. in addition, this catalyst is additionally needed for the activation of the natural anticoagulants, proteins S and C. Hence, antihemorrhagic factor deficiency thwarts the operate of each the natural process and medical aid mechanisms [1,2,3].

The adult daily demand has been calculable concerning ninety mcg/day for girls and one hundred twenty mcg/d in men [4,5], of that eightieth is absorbed through the terminal small intestine [4,6]. However, just like the alternative fat-soluble vitamins (A, D and E), it needs the chemical change action of exocrine gland enzymes and digestive fluid salts to solubilize it for absorption through the small intestine enterocytes, from that it's transported to the liver. Major causes of antihemorrhagic factor deficiency include; CF and hepatobiliary diseases like primary biliary inflammation, primary sclerosing inflammation, biliary abnormality and liver failure. antihemorrhagic factor deficiency might conjointly result from the employment of ordinarily prescribed medications such as; decoagulant and cephalosporins that inhibit antihemorrhagic factor epoxide enzyme, the catalyst required to scale back the antihemorrhagic factor when it's been change within the carboxylation of aminoalkanoic acid residues of the natural process factors [6,7].

This case aims to report a peculiar presentation of antihemorrhagic factor deficiency {in a|during a|in associate degree exceedingly|in a very} man admitted to our surgical service for a decompressive fasciotomy for an contractile organ intumescency resulting in compartment syndrome within the lower extremity.

Case Description

A 20-year-old man conferred with a 2-day history of left thigh pain and swelling when lifting a pallet at work. at first he felt a tearing sensation and pain that progressed to swelling over forty eight hours. On physical test, his left thigh was swollen, tender with restricted vary of motion however palpable leg bone, ginglymus and dorsalis pedis pulses. computerized axial tomography scan showed associate degree contractile organ intumescency of the posterior compartment involving the skeletal muscle muscles. because of the acute swelling and pain, the patient was taken to the hospital room for decompression of the intumescency and treat the compartment syndrome.

While the patient was taken for associate degree nascent limb-salvage surgery, decompressive fasciotomy, his natural process work-up results were offered. The patient's operative natural process profile showed coagulation factor time (PT) ≥ 100 sec (normal vary 11-13.5 seconds), activated partial thrombokinase time (aPTT) of ninety six.5 seconds (normal vary 30-40 seconds) and a coagulation factor level of 440 mg/dL (normal vary 150-400 mg/dL).

While the intumescency evacuation was happening, patient was given contemporary Frozen Plasma (FFP) that normalized his natural process parameters with a atomic number 78 of twenty five seconds associate degreed an aPTT of forty five.5 seconds. natural process profile recurrent the day when showed once more a atomic number 78 > 100 seconds associate degreed an aPTT of ninety.2 seconds, admixture studies were obtained for each and also the atomic number 78, aPTT numbers corrected to traditional vary, supporting the identification of an element deficiency. factor V and X assays when the FFP were traditional, hour and 123%, severally.

Further history taking indicated that the patient had associate degree abdominal surgery at 3-days elderly because of baby jaundice with a chronic course within the baby ICU. The patient had associate degree "Exploratory-Laparotomy, Jejunum-Ileostomy and Kasai River procedure (Hepatopertoenterostomy)" secondary to colonic perforation and

busted common duct, because of Choledochal Cyst, type IVc, and Biliary abnormality.

Subsequently, later in childhood the patient was stated a paediatric medico for symptom, poor weight-gain and short-stature. He underwent an in depth workup in childhood and was diagnosed with fat-soluble vitamins deficiency, upset and alternative similar diseases had been dominated out. Upon the identification vitamins levels were; antihemorrhagic factor

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