Bleeding and thrombosis in a patient with primary antiphospholipid syndrome using norethisterone

Antiphospholipid syndrome is an autoimmune hypercoagulable state caused by specific antibodies, and it is known to be associated with the occurrence of blood clots, or thrombosis, in the veins and/or arteries. However bleeding is rarely associated with the syndrome. Only a few cases of antiphospholipid syndrome have reported simultaneous bleeding and blood clots. There are several factors that might trigger the risk of blood clots in antiphospholipid syndrome, including drugs, and there are cases that reported blood clots induced by the drug norethisterone when used by patients with an underlying risk factor for blood clotting. Norethisterone is a drug containing a hormone similar to the progestogen hormone produced naturally in the body. It is used to regulate a number of menstrual cycle disorders, and many women used it to delay their cycles for several days.

Bleeding and Thrombosis in a Patient with Primary Antiphospholipid Syndrome Using Norethisterone is a journal article reporting the case of a 35-year-old Saudi woman diagnosed with antiphospholipid syndrome with a history of several spontaneous miscarriages and two previous lower limb deep vein blood clots. For those reasons, she was on warfarin tablet, which are used in the management of potential or existing clotting disorders. She had used norethisterone without a physician's prescription to postpone her menstruation during her vacation outside the country. Fifteen days after staring this medication, she developed severe upper abdominal pain and vomiting, which caused her to stop taking norethisterone and warfarin for tow days, then restarted at her local hospital . Due to her illness, she interrupted her vacation and returned to the country. She was presented to the hospital with heavy vaginal bleeding. During admission, she developed thrombocytopenia, which is a deficiency in blood platelets, and she was found to have extensive blood clotting in the large abdominal veins, called the inferior vena cava and bilateral common iliac, which conveys blood from all parts below the diaphragm back to the heart.

Detail laboratory tests were done for the patient that showed a more than 5 gram drop in hemoglobin below her base line level, a marked drop of platelet counts, and a marked prolongation of her coagulation profile. Prolonged coagulation means that blood was not clotting normally making her prone to further bleeding and especially vaginal bleeding. She received a blood transfusion and fresh plasma to restore her hemoglobin and to get a partial correction of the coagulation profile to stop or decrease the vaginal bleeding. At the same time her anticoagulation treatment in the form of heparin was continued because patients with antiphospholipid syndrome are at a high risk of blood clots even when their platelet counts are low.

At that time, the patient was complaining of moderately severe upper abdominal pain, for which she was investigated fully. The investigation included an abdominal CT- Scan that showed extensive clotting in her large vessels . As a result, she received a high dose of prednisolone intravenously for the first three doses then orally at a lesser dose. She also received intravenous immunoglobulin

for four days, and continued to receive anticoagulation treatment in the form of subcutaneous heparin, which was eventually replaced by oral warfarin. The patient's vaginal bleeding gradually stopped and her general condition gradually improved, and she was discharged after twelve days of good condition.

This case report is of interest since it found that the presence of heavy bleeding and low platelet in antiphospholipid syndrome do not prevent the concomitant occurrence of thrombotic complications .Also, the simultaneous management of thrombosis and heavy vaginal bleeding is a challenge for clinicians since there are no evidence-based guidelines regarding the handling of these cases. Norethisterone is normally safe to take, but it is not suitable for patients with an increased risk of deep vein thrombosis. Generally recognized risk factors for venous thromboembolism(VTE) in patients using Norethisterone includes patients with previous idiopathic or current venous thromboembolism or family history of VTE , and severe obesity (BMI > 30 kg.m2).

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