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Case Report

External iliac artery ligation – a nightmare to every gynecologist

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Introduction

Internal iliac artery ligation is an oft accomplished operative procedure to arrest intractable obstetric and gynecological hemorrhage. But all gynecologists will wonder to read about emergency external iliac artery ligation for tackling gynecological bleeding.

Case report

Mrs. X, 35 years of age came to our hospital, with history of menorrhagia and white discharge for the last 5 years. She was multiparous and had undergone tubectomy 12 years back. All her parameters were normal but sonography showed a small intramural fibroid in the fundal region. Her symptoms persisted despite medical treatment; hence decision for laparoscopic assisted vaginal hysterectomy (LAVH) was taken.

While performing LAVH the region around the right infundibulopelvic ligament started bleeding profusely. The procedure was abandoned and decision was taken for immediate laparotomy. On opening the abdomen, it was noticed that there was a big swelling with collected blood in the right adnexal region. After careful mopping, it was detected that the external iliac vein was injured. Amidst abdomen full of blood, attempt was made to repair the external iliac vein but all the efforts failed. We were compelled to ligate the right external iliac vein along with the external iliac artery hoping that no serious consequences would result. Subtotal hysterectomy was performed by us considering the patient's condition.

Immediately following surgery, the patient started complaining of excruciating pain in her right lower limb. On examination, her right leg was cold, bluish and motionless. Femoral pulse was absent on that side which was confirmed by ultrasound doppler study. After consulting a general surgeon, decision for removal of the ligature over the right iliac artery was taken. After exactly 3 hours of the first operation, second operation was performed and the ligature on the right external iliac vessel was removed. To our utter surprise, the region did not start bleeding.

Dramatically her pain was completely relieved. She was able to move her leg. Feeble femoral pulse reappeared. Arterio-dorsalis pedis pulse was also palpable. The right limb became warmer. Ultrasound doppler study was done

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on the next day which showed 50% reduction of blood flow through the right femoral artery. An orthopedic surgeon and a physician were consulted. They advised low molecular weight heparin, diltiazem and clopidogrel. She received antibiotics and analgesics. She was advised physiotherapy in consultation with physical medicine specialist. The numbness persisted in the distal part of her right lower limb for four weeks. Her postoperative period was otherwise uneventful. Even though mortality and limb loss are not reported in a series of such case reports [2].We view this procedure with skepticism .

Discussion

External iliac artery may get ligated while trying to ligate the internal iliac vessels or external iliac veins especially when the surgeon is operating in a field full of blood and desperately trying to ligate vessels to secure hemostasis. Mitra[1] has reported tying of the external iliac artery in a case cancer of the cervix uneventfully. Blohme and Brynger [2] report no mortality or limb loss after external artery ligation.

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