The Hidden Deep Culprit- Deep Vein Thrombosis In An Unusual Site

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Introduction

Symptomatic ovarian vein thrombosis (OVT) is a rare cause of acute abdominal pain. It is commonly seen in the post-partum period and in patients with recent abdominal or gynecologic surgery, hypercoagulable states, pelvic inflammatory disease (PID) or gynecologic malignancy. We report a rare case of OVT in a young female patient.

Case Report

A 26-year-old female gravida 1, para 1 and abortus 0 with no known past medical history presented to the emergency department with complaints of one-day history of gradually worsening right lower quadrant abdominal pain, radiating to her right flank and associated with fever and nausea. She denied associated dysuria, abnormal uterine bleeding or vaginal discharge. She was sexually active and had a normal vaginal delivery a year ago. She was on combined oral contraceptives (COC) and has been using COC since the age of 17.

Her menstrual periods were regular, with last menstrual period being 2 weeks prior to presentation. Last papanicolaou (Pap) smear was unremarkable and was done a year ago. She was up to date with immunizations. Past surgical history included appendectomy a few years ago and she denied any recent abdominal or gynecological surgery. She had no family history or personal history of hypercoagulable disorders or malignancy.

Her vital signs were normal on presentation. Physical examination was significant for tenderness to deep palpation in the right lower quadrant. On bimanual examination, she had no cervical motion tenderness or point tenderness over the ovaries or uterus. Laboratory tests were unremarkable. Pregnancy test, Neisseria gonorrhoeae, Chlamydia, Trichomoniasis and HIV tests were negative. Pelvic and abdominal ultrasound showed prominent adnexal vessels (parametrial veins) seen with pelvic congestion syndrome. CT scan of the abdomen and pelvis with contrast showed a non-obstructing thrombus in the right adnexal branches of the right gonadal vein.

Hypercoagulable workup including factor V Leiden, lupus anticoagulant, anticardiolipin antibodies IgG/IgM and beta-2 glycoprotein antibodies were normal. She was stared on heparin drip and then bridged to coumadin. She was also treated with empiric antibiotics for possible PID. After underlying risk factors for ovarian vein thrombosis were ruled out, the cause of OVT was attributed to the use of oral contraceptive pills. She was discharged home on coumadin and counseled on absolute contraindication to using oral contraceptive pill for contraception.

Discussion

This is a rare case of OVT in a young female patient presenting with features of pelvic congestion syndrome due to COC use. Although OVT is uncommon, it should be included in the differential diagnosis for women presenting with vague abdominal or pelvic pain as it leads to life threatening complications if left untreated. Detailed history and work up is necessary to identify the underlying cause for OVT. Oral contraceptive pill use should be identified as one of the rare risk factors for OVT in COC users when there is no other cause identified as reported in our case.

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