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Case Report

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OVARIAN VEIN THROMBOSIS. WHEN SHOULD WE THINK ABOUT IT?

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ABSTRACT

Ovarian vein thrombosis is an uncommon pathology, usually associated with delivery. Because of their non-specific symptoms, their diagnosis is often of exclusion. CT or RMI could be useful in diagnosis. An early treatment with antibiotics and heparin is extremely important for a good prognosis. In addition, a thrombophilia study must be performed to know other predisposing factors. We present a case of right OVT in a young puerperal woman without risk factors.

KEYWORDS: Ovary; Pelvis; Postpartum period; Venous Thrombosis; Thrombosis.

INTRODUCTION

Ovarian vein thrombosis (OVT) has an incidence of 1 case per 3000 deliveries. However, it could be higher for of caesarean section cases.[1] Frequently, it affects to the right ovarian vein. Different predisposing factors should be considered.[2,3] The diagnosis is a real challenge for the gynaecologist, being in many cases a diagnosis of exclusion.[4] For this reason, we should think about it in a patient with abdominal pain and fever after delivery. The early establishment of appropriate treatment can be extremely important for prognosis. We present a case of right ovarian vein thrombosis and its resolution in a patient without previous diseases.

CLINICAL CASE

A 24-year-old puerperal woman, with previous eutocic labour 5 days ago, has pain in right renal fossa irradiated to hypogastrium and fever (38ºC). Our patient, has no interesting previous diseases. On examination, abdomen was soft and depressible with no signs of peritoneal irritation. Thinking about acute pyelonephritis. treatment with piperacillin 4g/ tazobactan 0.5g every 8 hours was stablished. To corfirm the diagnosis, abdominal ultrasound is requested. It reports on acute retrocecal appendicitis. Acording to it, appendectomy is performed. During the procedure, acute apendicitis was not found.

In the absence of improvement, and the persistence of pain focused on the right iliac fosse, abdominal-pelvic CT and Uro-CT were requested. After that, left TVO was diagnosed.(Figure 1, 2).

With the diagnosis confirmed, treatment was started immediately. Enoxaparin 80mg every 12 hours in addition to Piperazilin-Tazobactam 4/0.5g was administrated. After 24 hours, the patient continued with fever (38ºC) and 87% O2 saturation with worsening of general condition. 25,000 leukocytes, 87% neutrophils and PCR 29 was the result of the analytical. For this reason, antibiotic regimen was modified. Imipenen 2g every 24 hours and vancomycin 1g every 12 hours was administrated. CT angiography shows absence of pulmonary thromboembolism. ECO-Doppler of lower limbs was performed, without thrombosis at that level X-ray shows a slight pleural effusion. After 48 hours since the change of treatment, the patient has normal constants with normal analytic. X-ray shows disappearance of pleural effusion. (Figure 3).

In 48 hours, the patient was discharged with good general condition. Ertapenem 1g daily 2 weeks and enoxaparin 120 every 24 hours for 6 weeks, was the outpatient treatment.

After 2 weeks, the patient was asyntomatic. The analytic did not show interesting data. Control CT does not show residual signs of thrombosis in any of the ovarian veins. Once the treatment was completed, a thrombophilia study was performed with normal results.

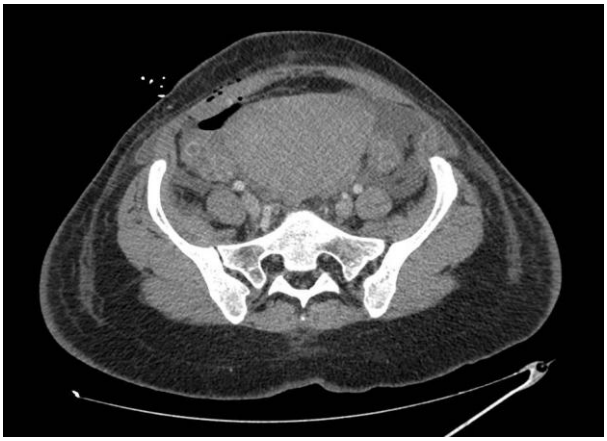

Figure 1: CT Ovarian vein thrombosis.

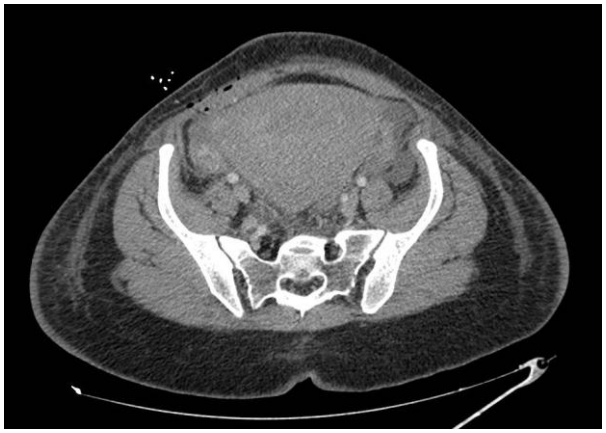

Figure 2: CT Ovarian vein thrombosis.

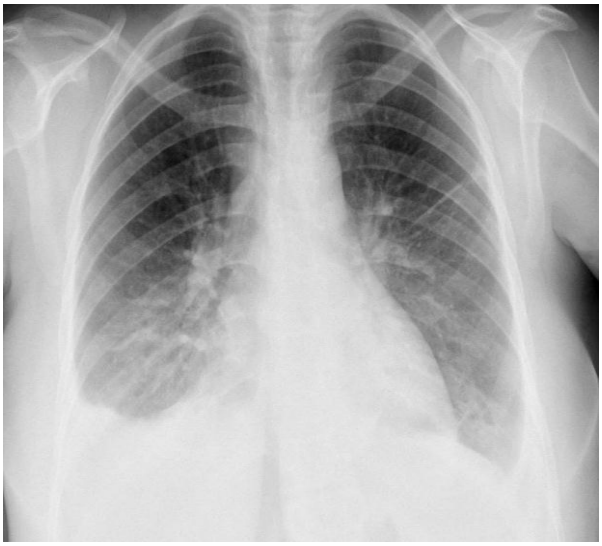

Figure 3: Pleural effusion before treatment.

DISCUSSION

According to the symptomatology of the patient, OVT should be a diagnosis to be taken into account. An OVT should be included in the differential diagnosis of a woman with hypogastric pain and/or iliac fosse accompanied of fever within the first week after delivery. According to the Leroug study, with a series of 13 patients, 92% of cases of OVT appear within 10 days postpartum.[5] Although their etiology can be idiopathic,[6] the different predisposing factors must be assessed, such as the recent delivery or caesarean. It is more frequent in caesarean deliveries, however in ours case, we see how we should not exclude the diagnosis in a vaginal delivery in patients without previous pathology.[1,7] Previous surgery, pelvic inflammatory disease, fibroids or stimulation with gonadotropins are also risk factors. Although most studies indicate a higher frequency in the right ovarian vein, Gakhal o Mantha show that it can also happen frequently in the left ovarian vein, in patients of any age or in non-puerperal patients.[8,9] As we can see in our case, the fever is present in up o half of the cases.[10] It is usually oscillating evening fever and tends to disappear in the first week after the diagnosis.[11,12]

The usual diagnostic sequence is similar to that we describe in our woman. An analytic must be performed in order to detect a possible leukocytosis and neutrophilia. It occurs usually in 70-100% of OVT.[10] We think that, although only 3 to 29% of patients with OVT are positive, it is essential to perform blood cultures in order to exclude other diagnoses.[13] Currently, no imaging test constitutes the gold standard for diagnosis. However both CT and MRI have demonstrated a high sensitivity for the detection of OVT.[12]

It is essential to initiate treatment early in order to reduce morbidity and mortality as well as the extension to other veins.[12] Controversy exist about which is the treatment of choice. It is based on two pillars. Broad spectrum antibiotics (eg empicillin-sulbactam, piperacillin/ tazobactam, ticarciclin-clavulanic or 3rd generation cephalosporin plus metronidazole) in addition to heparin. This can be unfractionated heparin (bolus of 5000 units plus infusion 16-18 units/ kg for a goal PTT of 1.5-2.0 times the patient´s vaseline) or low molecular weight heparin (enoxaparin 1mg/kg every 12 hours). Although there is no studies on which is better, we prefer enoxaparin because of its easy use and few adverse effects.[14] There is also no consensus on duration of treatment. As in pelvic inflammatory diseases, the antibiotic should remain up to 48 hours after the disappearance of leukocytosis and fever. Although some studies think that heparine is not necessary, it is generally preferred to maintain anticoagulation for at least 48 hours and up to 6 weeks postpartum if thrombosis affects to iliac vein or it is associated to thrombophilia.[12] According to Rottensentreich, anticoagulation is sufficient for 3 months with no recurrences within the first 4 months of follow-up.[10]

Recurrence in future pregnancies is rare for patients without risk factors. For this reason, we consider a study of thrombophilia should be performed in order to know other concomitant causes.[10,15]

The authors declare not to have any interest conflicts.

REFERENCES

1. Wysokinska EM, Hodge D, McBane RD 2nd. Ovarian vein thrombosis: incidence of recurrent venous thromboembolism and survival. Thromb Haemost 2006; 96: 126.
2. Enrique Donoso S. y cols. Trombosis de la vena ovárica derecha postparto vaginal. Rev Chil Obstet Ginecol, 2002; 67(4).
3. Garcia R, Gasparis AP, Loh SA, Labropoulos N. A rare case of idiopathic bilateral ovarian vein thrombosis. J Vasc Surg Venous Lymphat Disord, 2017; 5(4): 567-570.
4. Sorbi F, Mannini, Aldinucci M, Ghizzoni, Fambrini M. Ovarian vein thrombosis presenting as acute abdomen in puerperium. J Clin Diagn Res, 2016; 10(2): QD03-4.
5. Lerouge J, Sanguin S, Gondry J, Sergent F. Management of postpartum ovarian vein thrombosis. The experience of Amiens university hospital. Gynecol Obstet Fertil, 2016; 44(2): 88-95.
6. Rubido CdelV, Solano-Calvo JA, González-Hinojosa J, Valenzuela-Ruiz P, Marcos-González V, Zapico-Goñi A. Postpartum left ovarian vein thrombosis: case report and literatura review. Ginecol Obst Mex, 2015; 83(8): 499-504.
7. Brown CE, Stettler RW, Twickler D, Cunningham FG. Puerperal septic pelvic thrombophlebitis: incidence and response to heparin therapy. Am J Obstet Gynecol, 1999; 181: 143.
8. Mantha S, Sarasohn D, Ma W et al. Ovarian vein thrombosis after debulking surgery for ovarian cancer: epidemiology and clinical significance. Am J Obstet Gynecol, 2015; 213(2): 208.e1-4.
9. Gakhal MS, Levy HM, Spina M, Wrignley C. Ovarian vein thrombosis: analysis of patient age, etiology, and side of involvent. Del Med J, 85(2): 15-50; quiz 59.
10. Rottenstreich A, Da´as N, Kleinstern G, Spectre G, Amsalem H, Kalish Y. Pregnancy and non-pregnancy related ovarian vein thrombosis: Clinical course and outcome. Thromb Res, 2016; 146: 84-88.
11. Witlin AG, Sibai BM: Postpartum ovarian vein thrombosis after vaginal delivery: a report of 11 cases. Obstet Gynecol, 1995; 85: 775-80.
12. Brown CE, Stettler RW, Twickler D, Cunningham FG. Puerperal septic pelvic thrombophlebitis: incidence and response to heparin therapy. Am J Obstet Gynecol, 1999; 181: 143.
13. Garcia J, Aboujaoude R, Apuzzio J, Alvarez JR. Septic pelvic thrombophlebitis: diagnosis and management. Infect Dis Obstet Gynecol, 2006; 2006: 15614.
14. Friederich PW, Sanson BJ, Simioni P, Huisman MV, Kindt I, Prandoni P, Buller HR, Girolami A, Prins MH: Frecuency of pregnancy-related venous thromboembolism in anticoagulant factor deficient women: implications for prophylaxis. Ann Intern Med, 1996; 125: 955-60.
15. Brill-Edwards P, Ginsberg JS, Gent M, Hirsh J, Burrows R, Kearon C, Couture G: Safety of witholding heparin in pregnant women with a history of venous thromboembolism. N Engl J Med, 2000; 343: 1439-44.