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Case Report

**An often-overlooked factor in pelvic pain:
Pelvic congestion syndrome**

adnexal mass and diagnosed as mature cystic teratoma at frozen section. Frozen of the patient presented with mature cystic teratoma. Then the final diagnosis was the same result.

Intraoperative examination showed that both ovarian veins were highly dilated. All pelvic vascular structures were highly congested and varicose. This could explain the patient's bilateral pain. Since PCS is rarely seen in menopause, we did not include it among our preliminary diagnoses. Our patient underwent hysterectomy and bilateral salpingo-oophorectomy. Hysterectomy and bilateral oophorectomy, which is one of the treatment methods for severe pain in this syndrome, was applied. Informed consent was obtained from the patient.

The patient reported that the severity of postoperative pain was very low and there was no pain on the 21st postoperative day.

Discussion

CPP; with a multifactorial etiology is very common among women. Of women with CPP, 40% have previously applied for expert evaluation. Only one third of these women could have received medical assistance. PCS is one of the most important reasons for CPP. The prevalence of PCS is 10–30% in patients with CPP [2]. Gynecologists must always be careful with this diagnosis.

Although the underlying pathophysiology of PCS is not clear, it is probably due to a combination of dysfunctional venous valves, retrograde blood flow, venous hypertension, and dilatation. The cause of these dysfunctional venous valves may be congenital absence or insufficiencies developed in venous valves at a later period. Hormonal causes, which are one of the most accused causes in the etiology of PCS, are almost absent in postmenopausal period [3].

Being generally seen in young patients in the reproductive period, PCS was seen in a woman in menopause in the present case report. Similarly, the increased number of pregnancies in multiparous patients is one of the causes of PCS because hormone values that are rapidly increasing in pregnancy cause congestion. Furthermore, increased intrauterine volume during pregnancy applies pressure on the pelvic vessels, causing reflux

Introduction

Chronic pelvic pain (CPP) is defined as intermittent or persistent pain not associated with pregnancy, menstruation or coitus, which is localized in the abdomen or pelvis lasting at least three to six months. It is a common complaint with a prevalence ranging from 2.1% to 24% [1]. Pelvic congestion syndrome (PCS) is a syndrome associated with pelvic varices causing CPP and more frequently seen in women in the reproductive period. However, this syndrome should not be ignored in the diagnosis for women with pelvic pain in the postmenopausal period as in the patient presented herein.

Case Report

A 44-year-old female patient was admitted to our clinic with the complaint of CPP lasting for approximately nine months. The patient, who had four children, was in menopause for one year. Her sensitivity was found to be bilateral in the pelvic examination. Although there was a mass only on the right side of the patient, the pain was on both the right and left sides. This was interesting to us before surgery.

There were no signs of infection. Pelvic ultrasound revealed a heterogeneous mass of 4x5 cm in the right adnexa. Interestingly, the patient had an equally severe pain on both sides although the mass was on the right side. The patient with normal tumor markers underwent a magnetic resonance imaging (MRI) in an external center and results showed that the mass in the right adnexa was compatible with the teratoma. Furthermore, there were dilatation in the bilateral pelvic vascular structures. The patient was operated for right

in the internal iliac veins and in the ovarian vein. Our patient, who had given birth six times, had four living children.

Patients with PCS may usually present with asymptomatic complaints. During congestion-induced coitus, cervical movements can cause severe and prolonged pain. Similarly, nonspecific urinary and gastrointestinal complaints such as dysuria due to perivesical congestion, which is similar to our case, may confuse the clinician. As a matter of fact, it was interesting that our patient had bilateral severe and chronic pain while there was only a simple cystic formation on the right.

Dilatation above 6 mm in the pelvic veins determined through pelvic ultrasonography which is one of the noninvasive methods and reflux in the ovarian vein and cystic enlargements in myometrium determined through Doppler ultrasound are important criteria for the diagnosis. Although MRI is more advantageous than ultrasound, venography is the gold standard for diagnosis [4].

In the treatment of PCS, contraction is provided in the veins with progesterone hormones (medroxyprogesterone acetate). It has been shown to relieve symptoms in the short term in about 40% of patients. In recent pilot studies, Implanon has been shown to be an effective alternative in the treatment of PCS [5].

As in our case, hysterectomy and oophorectomy improve the symptoms. Ovarian vein ligation is another preferred surgical procedure. Although this process has a success rate of 73%, there is a high probability of recurrence. Embolization, which was first performed in 1990, is evolutionary in the treatment of PCS [6]. Rapid recovery can be achieved through unilateral or bilateral embolization following the sclerosing agent infusion. The sclerosing agent formed by mixing air, gel and sodium tetradecyl sulfate is infused from the ovarian vein. A prospective study has reported an improvement of 83% in long-term follow-up of up to four years [7,8] (Figure 1).



Figure 1: The appearance of pelvic congestion in ovarian veins at operation.

Conclusion

PCS should be taken into consideration in the differential diagnosis of CPP. It is generally seen in women in the reproductive period. However, it should be kept in mind as it is rarely seen in women in menopause as in our case.

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