



Journal Homepage: -www.journalijar.com
**INTERNATIONAL JOURNAL OF
 ADVANCED RESEARCH (IJAR)**

Article DOI:10.21474/IJAR01/13847
 DOI URL: <http://dx.doi.org/10.21474/IJAR01/13847>



RESEARCH ARTICLE

OVARIAN VEIN SYNDROME: A CASE REPORT

Abderrazak Benazzouz, Yassine Karmouch, Fouad Hajji, Rachid Zaini and Omar Ghoundale
 Department of Urology, CaddiAyyad University of Marrakech, Ibn Sina Military Hospital, Marrakesh, MAR.

Manuscript Info

Manuscript History

Received: 30 September 2021
 Final Accepted: 31 October 2021
 Published: November 2021

Keywords:-

Ovarian Vein Syndrome, Renal Colic,
 Multiparous, Hydronephrosis,
 Laparoscopy

Abstract

The ovarian Vein Syndrome was first reported in 1964, yet its existence as a true pathophysiological entity remains controversial. It may present as an acute or chronic disease, typically affecting young, multiparous women. We present in this article a 32-year-old patient with chronic renal colic, ultrasound and CT urography showing an extrinsic compression of the right lumbar ureter by the ovarian vein, a ligation, and a resection of the ovarian vein were performed by transperitoneal laparoscopy.

Copy Right, IJAR, 2021., All rights reserved.

Introduction:-

Ovarian vein syndrome (OVS) is a rare condition caused by varicose, dilated ovarian veins inducing chronic ureteral obstruction. The clinical symptoms of OVS include renal colic, hydronephrosis, nephroptosis, hypogastralgia and chronic low back pain.

OVS is difficult to diagnose¹. Ovarian varicosities may appear on contrast-enhanced computed tomography (CT) or magnetic resonance imaging (MRI). MRI is preferable as it avoids the large radiation dose associated with CT, which should be avoided when possible in young women.

We describe in this article the extrinsic obstruction of the right ureter by the ovarian vein.

Case Presentation:-

A 32-year-old female patient, mother of 02 children, who has been suffering from right renal colic for several months unrelated to menstruation.

Abdominopelvic ultrasound showing moderate hydronephrosis and hydroureter. The parenchymal thickness of the right kidney was 16mm.

Computed tomography (CT) urography provides more information about the obstruction and determines the extrinsic compression of the right lumbar ureter by the ovarian vein.

Corresponding Author:- Abderrazak Benazzouz

Address:- Department of Urology, CaddiAyyad University of Marrakech, Ibn Sina Military Hospital, Marrakesh, MAR.

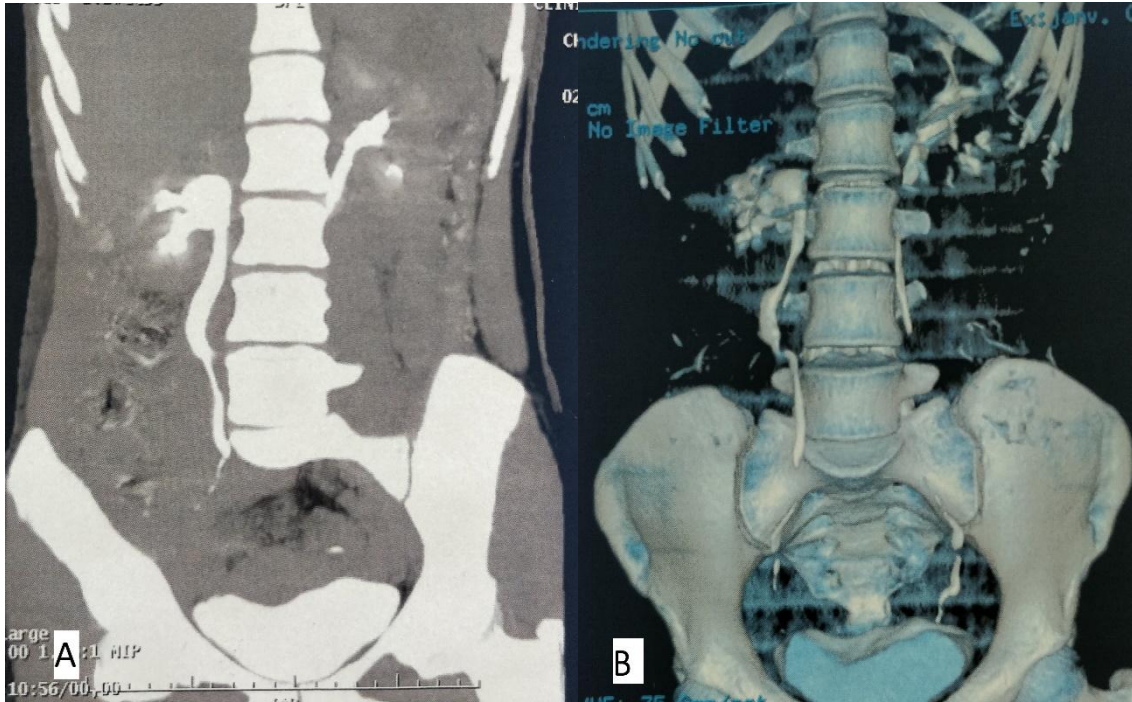


Figure 1:- CT images(A,B)show right ureterhydronephrosis.

Laparoscopic ureterolysis shows the right ovarian vein crossing the anterior surface of the iliac ureter, compressing the iliac ureter against the iliac vessels.

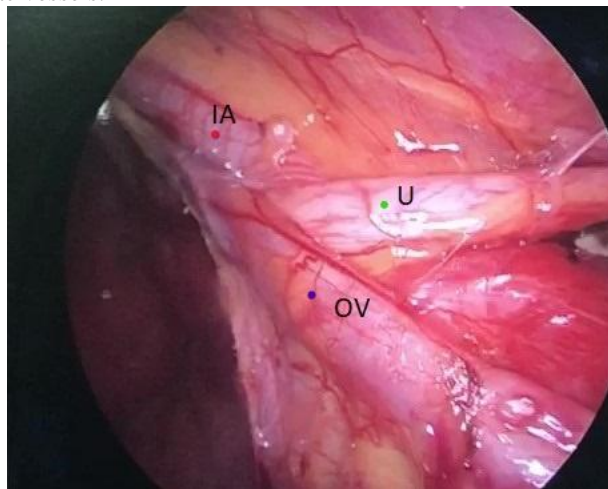


Figure 2:- laparoscopic image showing the compression of the right ureter by the ovarian vein against the iliac artery.(OV)Ovarian vein, (U)Ureter, (IA)Iliac Artery.

Ligation and resection of the ovarian vein were performed, the postoperative course following this surgery was uncomplicated.

The patient was seen after 03 months and reported the disappearance of pain and renal colic as well as renal dilation on control imaging.

Discussion:-

In 1964, Clark published a series of 129 cases of right ovarian vein syndrome.²

Ovarian vein syndrome can manifest as an acute condition during or shortly after pregnancy or as a chronic, recurring disease. Chronic variants most often occur in multiparous women.^{3,4,5}

Pressure from the pregnant uterus can cause dilation of the ovarian veins and valve incompetence.

The dilated veins then compress the ureter against the external iliac artery or the psoas muscle. However, persistent and significantly elevated venous pressure is required for the ovarian veins to obstruct a thick, muscular-walled ureter.⁶

Historically, the right ureter is more often involved in ovarian vein syndrome than the left. This could be explained by its proximity to the iliac vessels and the course of the right ovarian vein; generally, it has a direct anastomosis with the inferior vena cava.^{2,3,6,7}

Ovarian vein syndrome is rare in nulliparous women.^{2,3,6}

Symptoms are variable and nonspecific, including abdominal pain, particularly in the iliac fossa, flanks, and hypochondrium.

Urinary symptoms of ureteral obstruction include recurrent urinary tract infections, hydronephrosis, pyelonephritis, renal colic and hematuria.⁵

Conclusion:-

Extrinsic compression of ureters such as tumor compression or retroperitoneal fibrosis, renal colic, and infections, e.g., tuberculosis, are possible differential diagnoses, as are visceral emergencies such as appendicitis. Neurological and musculoskeletal disorders should also be taken into account. Therefore, many feel that Ovarian Vein Syndrome is ultimately a diagnosis of exclusion⁸.

Additional Information

Disclosures

Human subjects:

All authors have confirmed that this study did not involve human participants or tissue.

Conflicts of interest:

In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work.

Financial relationships:

All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work.

Other relationships:

All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

References:-

1. Wang, Ruizhi, Yan Yan, Songhua Zhan, Litao Song, Weihua Sheng, Xu Song, and Xiaolin Wang. "Diagnosis of Ovarian Vein Syndrome (OVS) by Computed Tomography (CT) Imaging." *Medicine* 93, no. 7 (July 25, 2014): e53.
2. Clark J. The right ovarian vein syndrome. 2nd ed. Philadelphia: W.B. Saunders Company; 1964
3. Tourne G, Ducroux A, Bourbon M, Blinding H. The ovarian vein syndrome: eight cases and review of the literature. *J GynecolObstet Biol Reprod (Paris)* 2002 Sep;31(5):471-7.
4. Marcondes Pereira R, Ferreira AA, Lane E. Diagnosis of the right ovarian vein syndrome. *Am J ObstetGynecol* 1969 Mar 15;103(6):888-9.
5. Bhutta, Hina Y., Stewart R. Walsh, Tjun Y. Tang, Colin A. Walsh, and James M. Clarke. "Ovarian Vein Syndrome: A Review." *International Journal of Surgery* 7, no. 6 (2009): 516-20.
6. Dure-Smith P. Ovarian syndrome: is it a myth? *Urology* 1979 Apr;13(4):355-64
7. Shah MS, Tozzo PJ. Right ovarian vein syndrome. *Urology* 1974 Apr;3(4):488-90
8. Gettman MT, Lotan Y, Cadeddu J. Laparoscopic treatment of ovarian vein syndrome. *JSLs* 2003 Jul-Sep;7(3):257-60.