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Case Report *Volume 7 Issue 1*

An Interesting Case of Pseudo Aneurysm of the Right Uterine Artery

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Abstract

As a gynecologist one meets different types of conditions involving the uterus and adnexa. Ovarian cysts are an important category by themselves. On a casual ultrasound any cystic mass in the region of the adnexa may be termed an ovarian cyst. But this is not so. Pseudo aneurysm of the major vessels in this reason and the uterine artery in particular can be difficult to diagnose.

This particular case was exciting to work with. Not only are pseudo aneurysms rare, the National institute of health, {NIH} has given the statistics of 2-3 per thousand deliveries. Their diagnosis may not be picked up on a routine ultrasound. Confirmation may require a Doppler study, or better seen with contrast enhanced computed tomography
Treatment of condition can also be a challenge.

Where in days gone by total hysterectomy was treatment of choice, now angiogram of concerned vessels done followed by embolization of the pseudoaneursym. this procedure is less radical and will preserve fertility of mother.

Keywords: Uterus; Adnexa; Tomography; Hysterectomy; Pseudoaneursym

Abbreviations

TAE: Trans Catheter Arterial Embolization; USG: Ultrasound Sonography; MRI: Magnetic Resonance Imaging

Introduction

Case History

34yrs old lady P3+0 with 3 previous LSCS presented with continuous bleeding p/v for past 2 years

Menstrual Cycles

Regular until 2 year ago -4-5/30days

In The last 2 years she was continuous bleeding p/v with intermittent heavy flow.

She presented right side of lower abdomen pain, pain is constant increased with movements.

Medical History

Not a Diabetic, Hypertension, Euthyroid

Investigation

So far, ultrasound done in west Bengal s/**o** Uterus 120x51x48mm, bulky uterus, small anterior wall fibroid Endometrial thickness–normal, right ovary suggestive of thin wall cyst 4.3x3.4mm, right adnexa suggestive of oval shaped aneurysm 6.7x5.0x4.6mm with peripheral thrombosis with high velocity.

Examination

- O/E : she was afebrile
- BP- 100/80mmhg
- P/A- soft
- LSCS SCAR – Normal
- P/S – cervix hypertrophied , p/v – cx pointing downwards ↓ uterus bulky , fullness in right adnexa

Investigation

- CBC – Hb 12.2g/dl , Rbc 4.35mill, pcv 38.3%, tc 9060
- Blood group – o positive
- PTT- Aptt test-24.2, control-27 , PT- 11.1, control10.6 , PT {INR }-1.05
- Rbs-92mg/dl , Urea-24mg/dl, Electrolytes normal ,Hba1c-5.4%
- Tsh-0.57miu/ml, Ft4-0.57ng/dl
- Urine routine – normal
- Ecg – sinus rhythm
- Xray chest - no significant abnormality

In view of above findings patient was referred to vascular surgeon who diagnosed her as right ovary pseudo aneurysm +- AVM of the uterus.

640 Slice CT Whole Abdomen with Triphasic Protocol

Ct abdomen was done which showed large lobulated pseudo aneurysm of the right uterine artery with associated AV fistula in the right adnexa.

peripheral eccentric thrombus within the pseudo aneurysm with maximum thickness of the thrombus 3.7cm
A small 9x10mm malformation /AV fistula in the fundus of uterus. Patient was referred to intervention radiologist and right uterine artery pseudo aneurysm embolization done.

Procedure

- Under LA, USG guidance
- Left CFA was accessed using micro puncture set
- 5f sheath was sited
- Using c1 catheter right internal iliac artery was catheterized
- Prograt micro catheter was used
- Uterine artery angiogram revealed tortuous uterine artery with a large pseudo aneurysm
- Right uterine artery /pseudo aneurysm embolised with lipiodol 10ml +2ml glue
- Post procedure angiogram showed no active extravasation
- sheath removed
- manual hemostasis achieved
- Patient was advised to come after 4 -6 weeks for follow up ultrasound
- In order to check the resolution of the aneurysm

Discussion

The first case of UAP was reported in 1997. Its exact incidence has not yet been determined in women, and it has long been described as “very rare”.

This suggests that many cases may be asymptomatic or resolve spontaneously, and therefore remain undiagnosed. Considering that UAP can cause life-threatening haemorrhage, it is important that obstetricians and gynaecologists recognize and diagnose UAP early.

UAP can usually be diagnosed using colour Doppler ultrasonography, CTA, and MRI. Ultrasound demonstrates turbulent arterial flow with a to-and-fro or yin-and-yang pattern that results from blood flow into the pseudo aneurysm, which is pathognomonic of pseudo aneurysm. CTA can better identify the feeding vessels of UAP with minimal invasiveness and within a short period of time, and is a powerful diagnostic tool when abnormal vascular structures are identified by colour Doppler ultrasonography. Tsunoda et al. reported a case in which hysteroscopy was used to diagnose UAP that was difficult to differentiate from retained products of conception on ultrasound and CT.

In the past, the main choice of treatment for UAP was open surgical management, including hysterectomy and ligation of uterine or internal iliac artery. Further, several case reports have mentioned the use of uterine balloon tamponade and laparoscopic surgery for the treatment of UAP.

Treatment options have therefore evolved from surgery to TAE {trans catheter arterial embolization} which is safe and effective in recent years especially for patients who desire fertility preservation.

Etiology

UAP is usually associated with a prior traumatic surgical procedure, the most common of them beings caesarean

section. They can also occur as a complication of myomectomy, hysterectomy, laparoscopic excision of deep endometriotic lesions, dilation and curettage, uterine cervical conisation, and so on. UAPs can originate from a disruption of the continuity of the uterine arterial wall that is incidentally damaged during previous procedures. However, there have been some cases of UAP occurring after non-traumatic delivery or abortion. We also report two cases of UAPs developing after spontaneous vaginal delivery and second-trimester pregnancy termination.

References

1. Tingt W, Beibei L, Kui L, Jinying Y, Ruijin W (2021) Diagnosis and treatment of uterine artery pseudoaneurysm Case series and literature review.