Endovascular Treatment of Iatrogenic Uterine Artery Pseudoaneurysm: A case report

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Disclosure

Speaker name:
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I have the following potential conflicts of interest to report:

☐ Consulting
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

☐ I do not have any potential conflict of interest
Uterine Artery Pseudoaneurysm (UAP)

- 3% of patients with postpartum hemorrhages
- Etiology: traumatic deliveries, cesarean sections and other uterine interventions
- Clinical presentations: pelvic pain, severe uterine bleeding, hypovolemic shock or fever
Diagnosis

• Color Doppler ultrasound
• CT scan and CT angiography
• MRI
• Conventional angiography
Case 1

• A 31 yr woman presented by sever vaginal bleeding 18 days after cesarean section
• After initial stabilization the patient was asymptomatic without abdominal & pelvic pain.
• Pelvic exam: Normal vagina & cervix
• Hgb level: 10.5 gr/dl
Case 1

• Transvaginal ultrasonography: A 40×30×30mm pseudoaneurysm with hematoma in lower segment of uterus in territory of left ovarian artery.
Figure 1: Selective left internal iliac angiogram: shows the pseudoaneurysm (arrow), arising from the left uterine artery.
• Figure 2: Selective left internal iliac angiogram (Post embolization) using gel foam and embolization coil showed complete obliteration of the pseudoaneurysm.
Case 2

• A 34 yr woman referred to us by severe vaginal bleeding 1 month after C/S (experiencing multiple episodes of vaginal bleeding and disposal of clots in the course of 1 month) without any other symptoms.

• Hemodynamically stable

• No lesion in cervix, vagina or external genitalia except some clot in vagina

• She had 2 C/S before recent delivery

• Hgb level: 10.6 gr/dl
Case 2

- Transvaginal ultrasonography: Hematoma & pseudoaneurysm in territory of left uterine artery (20 × 15 mm)
- Selective left uterine angiography was done by right femoral access and aortic bifurcation crossover.
Figure 3: Selective left internal iliac angiogram: shows the pseudoaneurysm (arrow), arising from the left uterine artery.
Figure 4: Selective left internal iliac angiogram (Post embolization) using gel foam and embolization coil showed complete obliteration of the pseudoaneurysm. (A) post gel foam angiogram and (B) Coil embolization of uterine artery.
• Despite the previous belief UAP is not rare (2-3/1000 delivery)

• Early Diagnosis by clinical suspicion and use of proper paraclinic, may save patient’s life and uterus.

• Angiography is the gold standard for diagnosis and planning endovascular treatment in the same session. It can be done even in hemodynamically unstable patient with little complications. It preserves patients’ uterous and reproductivity.
According to the WHO recommendation, the cesarean section should not exceed 15% of all deliveries.

Despite planning and advice of Iran’s ministry of health in recent years, about 50% of deliveries in Iran is by cesarean section. Since UAP is more common after C/S, facing social, cultural and economic factors leading to increased cesarean could reduce the rate.

Timely accurate diagnosis and treatment saves patient’s life and fertility with low complication rate.
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Thanks
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