

# Cervical Cyst

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DII RAD 4001 elective

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# History

7/26/19 H&P from OSH:

- CC: vaginal bleeding
- Unknown last menstrual period
- No further details
- Transferred to MHH for higher level of care

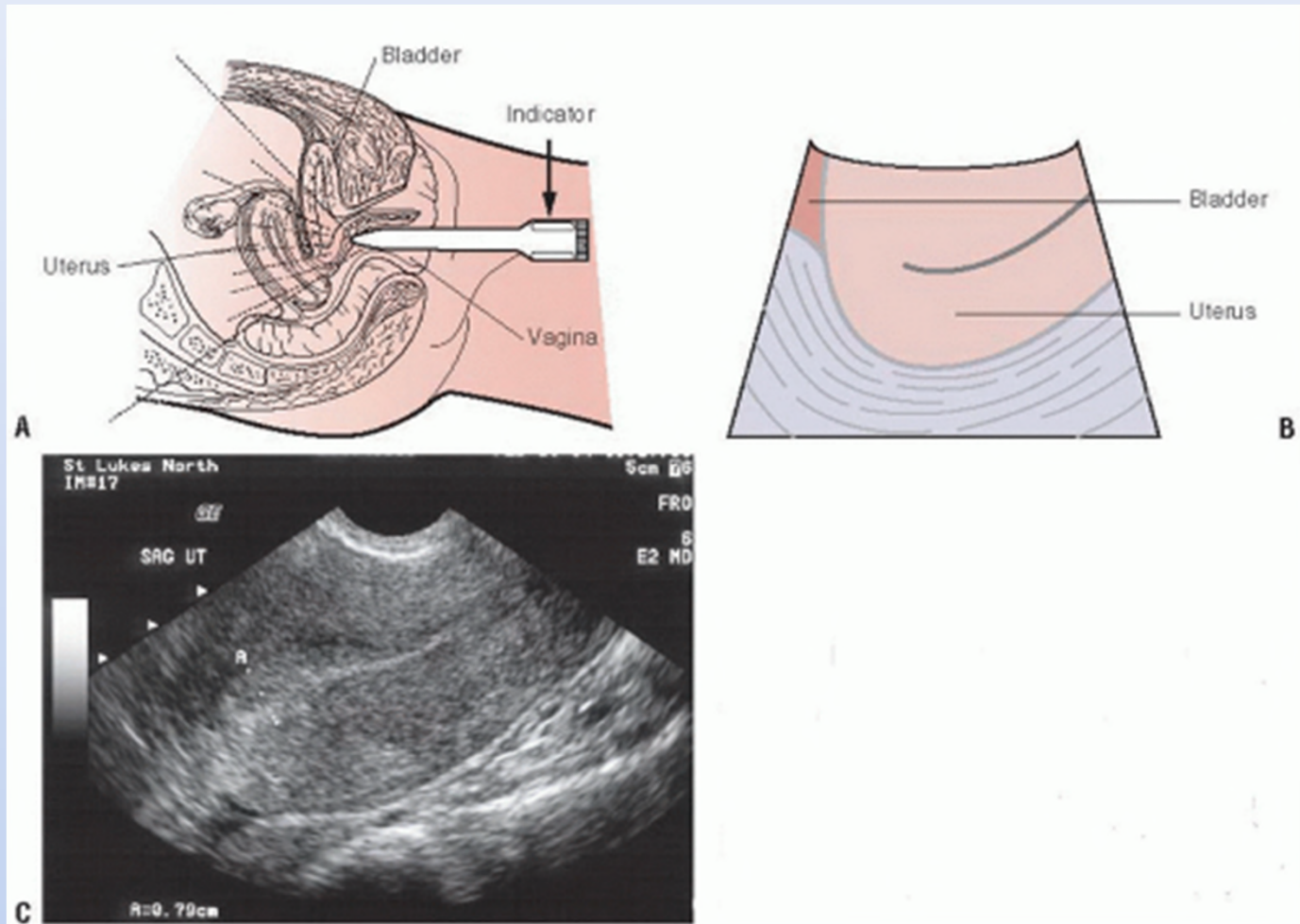
7/27/19 H&P at MHH:

- 34 yo previous G2P0111
- Patient unsure of last menstrual period
- Patient reported vaginal bleeding beginning 7/25, improved on 7/26, worsened on 7/27
- Required 3-4 pads to absorb

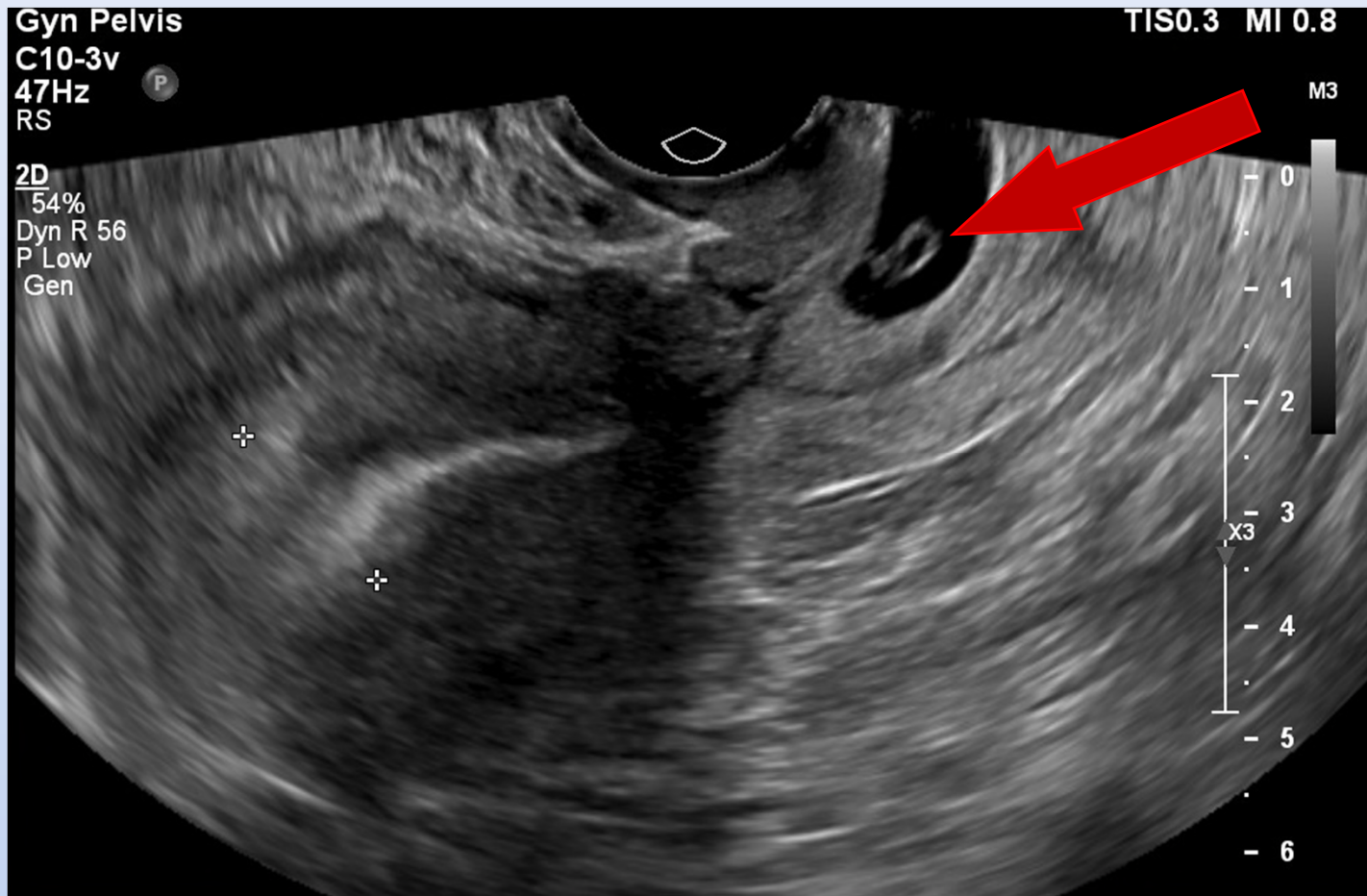
# Relevant Labs

- Beta – HCG levels provided by patient:
  - 15,000 (7/24)

# Refresher on Pelvic Ultrasounds



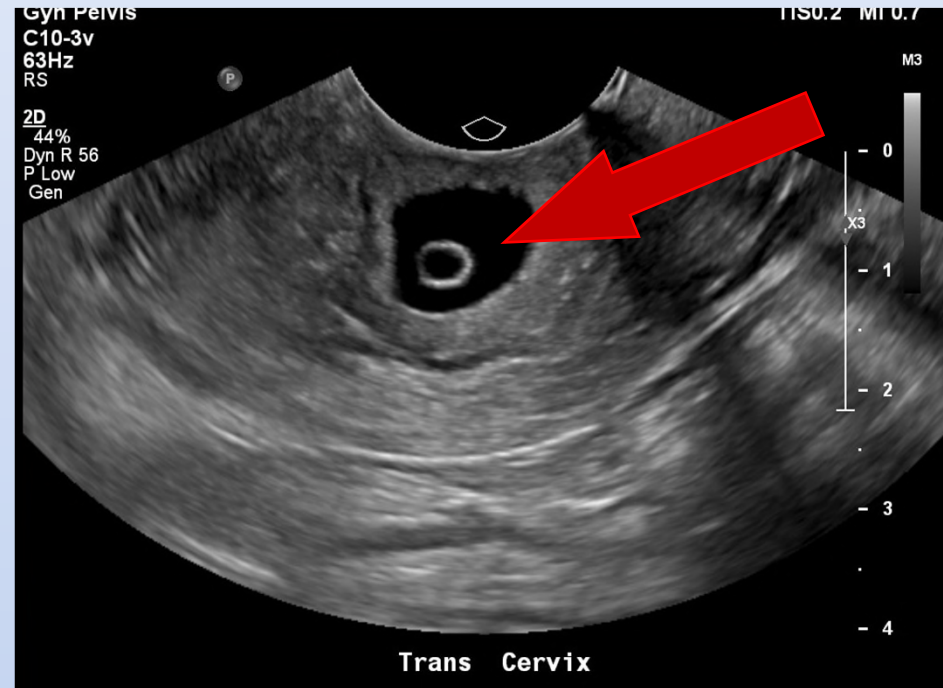
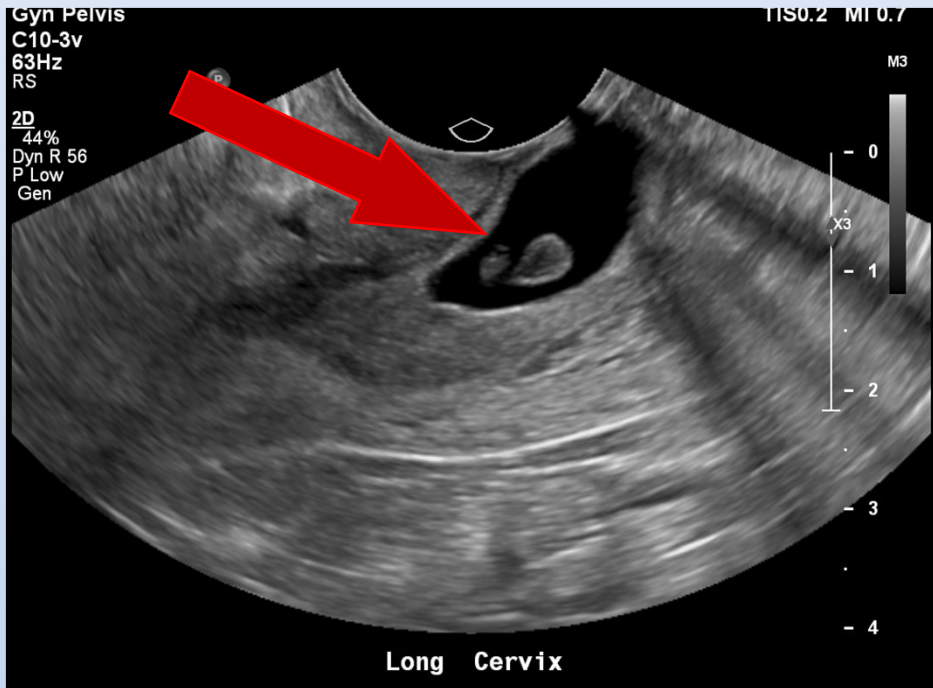
# 7/27/19 – TVUS Uterus



# 7/27/19 – TVUS Cervix

## Longitudinal View

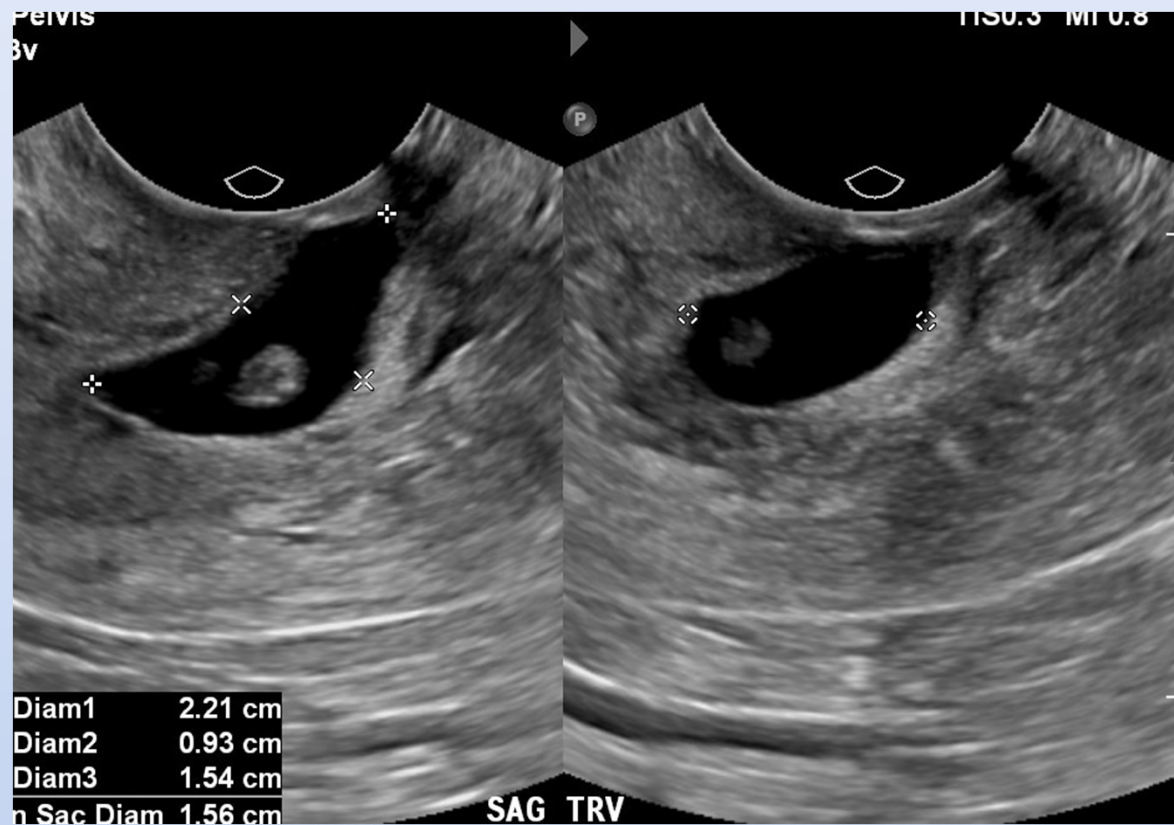
## Transverse View



# 7/27/19 – TVUS Cine of Cervix



# 7/27/19 – TVUS Cyst Measurement





# Findings

- Fluid filled space within cervix
  - 2.2 cm x 1.5 cm x 0.9 cm
- Motile tissue
- Thickened Endometrial Stripe
- Cervical Dilation

# Differential Diagnosis

- Cervical Ectopic Pregnancy
- Partial Hydatiform Mole
- Endometrioma/Endometrial Cyst

# Discussion

- Visible cystic mass within the cervix
  - Atypical location for ectopic pregnancy
    - Less than 0.1% of all ectopic pregnancies
  - Unlikely endometrioma due to lack of correlating history
- TVUS allowed for clear visualization of pathology
  - Unclear if early at risk pregnancy vs fallopian ectopic pregnancy vs beta HCG secreting tumor
- Cost of TVUS
  - No great sources – likely \$250-\$1000

# Final diagnosis

- Cervical Ectopic Pregnancy

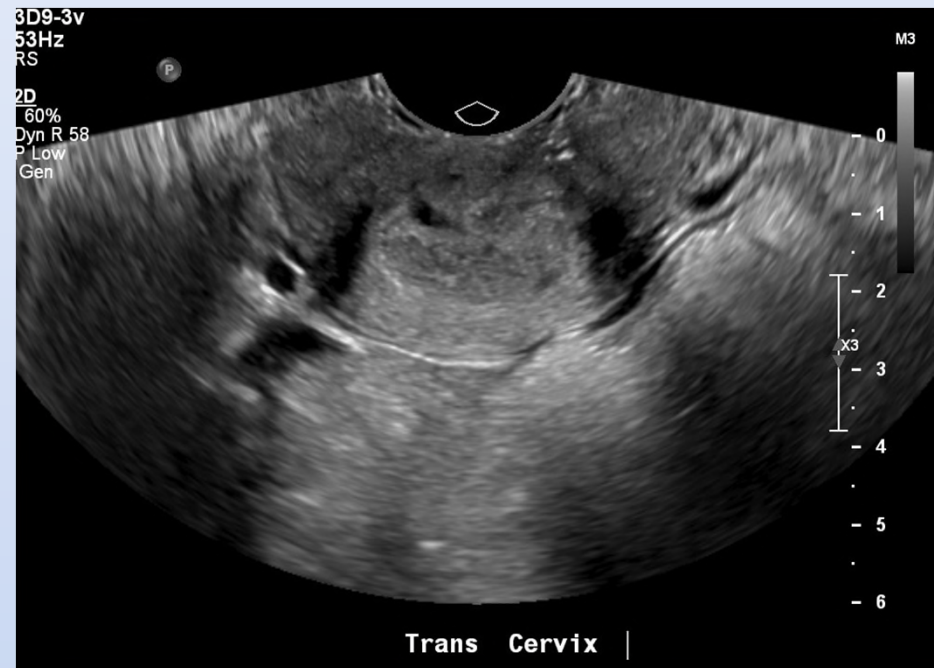
- Labs:

- bHCG 15,000 (7/24) > 17,432 (7/30) > 26K (08/01 per pt)--> 29K (08/05 per pt), repeat in house (08/05, 25071), repeat on 08/07 (3941)

# More Imaging – 7/29



# More Imaging – 7/29



# ACR Appropriateness Criteria

## Variant 4: Premenopausal vaginal bleeding. First study.

Radiologic Procedure	Rating	Comments	RRL*
US pelvis transvaginal	9	3-D imaging may be a useful adjunct to 2-D imaging to better characterize an intracavitary abnormality.	O
US pelvis transabdominal	8		O
US duplex Doppler pelvis	5	This procedure may be useful to better characterize a focal or diffuse endometrial abnormality.	O
US saline infusion sonohysterography	4	3-D imaging may be a useful adjunct to standard 2-D imaging if intracavitary abnormality is suspected.	O
CT pelvis with IV contrast	2		☒☒☒
MRI pelvis without and with IV contrast	2		O
CT pelvis without IV contrast	1		☒☒☒
CT pelvis without and with IV contrast	1		☒☒☒☒
MRI pelvis without IV contrast	1		O
<b>Rating Scale:</b> 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

# Take home points

- Transvaginal Ultrasound safe, effective way to assess pre-menopausal women with abnormal uterine bleeding
- Cost-effective
- Can fully assess gynecological structures



# References

Jeanne Jacoby, Michael Heller. Pelvic Ultrasound in the Nongravid Patient.  
<https://radiologykey.com/pelvic-ultrasound-in-the-nongravid-patient/>

Sweta Singh. Diagnosis and management of cervical ectopic pregnancy. J Hum Reprod Sci. 2013 Oct-Dec; 6(4): 273–276.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3963313/>

American College of Radiology ACR Appropriateness Criteria® Clinical Condition: Abnormal Vaginal Bleeding. Accessed:  
<https://acsearch.acr.org/docs/69458/Narrative/>