## Ultrasound-Compatible Gynecologic Training Phantom for Hydrogel Injection

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## Goals:

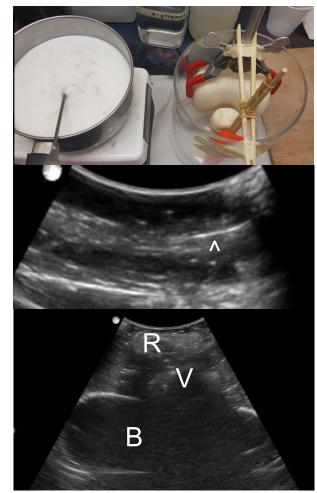
 Develop an ultrasound-compatible female pelvic phantom for training hydrogel injection used during brachytherapy planning.

## Significance:

- Resident training of a difficult procedure.
- Hydrogel spacing protects critical structures & minimizes complications.

## Results:

- 1st Prototype: Realistic texture.
- 2<sup>nd</sup> Prototype: Echogenicity.
- 3<sup>rd</sup> Prototype: Anatomical Accuracy.
- Needle and anatomy visible under abdominal & transrectal ultrasound.



[Top] Phantoms under abdominal ultrasound showing needle (^) rectum (R), vaginal canal (V) and the bladder (B)

