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:
- 1\textsuperscript{st} Prototype: Realistic texture.
- 2\textsuperscript{nd} Prototype: Echogenicity.
- 3\textsuperscript{rd} 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).