Prostate Elastography Phantom

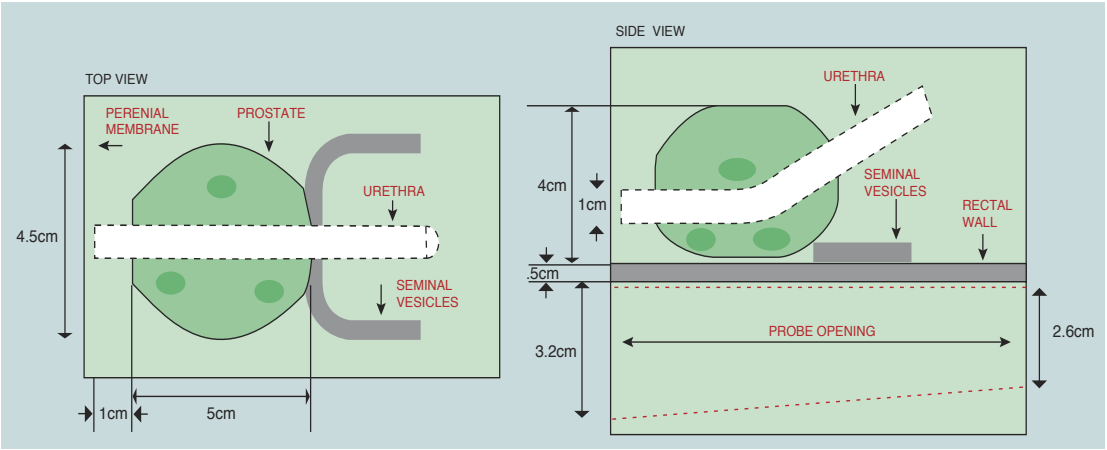
The ideal demonstration tool for sonoelastography

The CIRS Model 066 Prostate Elastography Phantom is a disposable phantom developed for demonstrating procedures which involve the exciting new modality of sonoelastography.

The prostate, along with structures simulating the rectal wall, seminal vesicles and urethra, is contained within an 11.5 cm X 7.0 cm X 9.5 cm clear acrylic container. A 3 mm simulated perineal membrane enables various probes and surgical tools to be inserted into the prostate.

Based on the popular CIRS Tissue Equivalent Ultrasound Prostate phantom. The Model 066 contains 3 isoechoic lesions that are three times harder than the simulated prostate tissue. Under normal ultrasound they cannot be detected but are readily visible on elastograms.

Model 066



Tissue Simulation & Phantom Technology

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Model 066 Specifications

CONTAINER:
Material: Clear acrylic
Dimensions: 11.5 cm X 7.0 cm X 9.5 cm
Front probe opening:
3.2 cm diameter
Rear probe opening:
2.6 cm diameter

PERINEAL MEMBRANE:
4.5 cm diameter
3 mm thick urethane

BACKGROUND GEL:
Similar to water with very little backscatter attenuation
≤ 0.07 db/cm/MHz

URETHRA:
Dimensions: 0.7 cm diameter
Material: Zerdine® (1), low scatter

SEMINAL VESICLES:
Dimensions: 7 mm diameter X 10 cm long
Material: Zerdine® (1)
Properties: Speed=1540 m/s
Attenuation= 0.5 dB/cm/MHz
Backscatter similar to liver tissue

PROSTATE:
Dimensions: 5 cm X 4.5 cm X 4.0 cm
Material: Green Zerdine® (1), high scatter
Volume: approximately 53 cc

RECTAL WALL:
Dimensions: 6 cm X 11 cm X 0.5 cm
Material: Zerdine® (1)
Properties: Speed=1540 m/s
Attenuation= 0.5 dB/cm/MHz
Backscatter similar to liver tissue

LESIONS:
3 embedded isoechoic lesions,
1 cm diameter randomly placed.

Normal Ultrasound Image