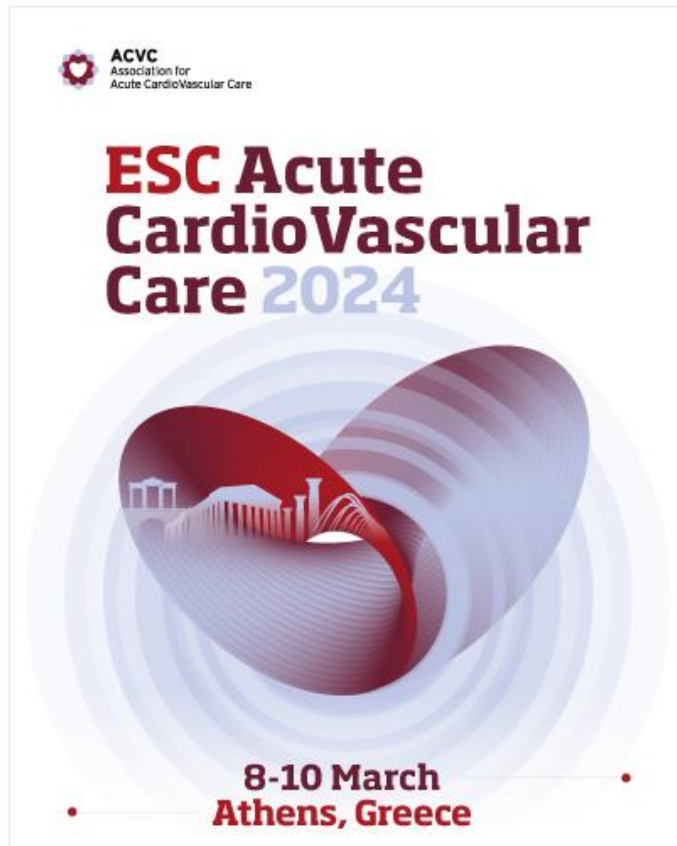


# How to build a home made phantom for invasive procedures



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# How to build a homemade phantom

- Gelatine Phantom
- Agar-agar Phantom
- Pericardiocentesis Phantom

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# Gelatine phantom

## Materials:

- The mold: Gelatine, Water, Metamucil, flour/food colorant
- The target: different type de balloons
- The container: 1 L tupper ware
- The tools: syringe, Razor Blade/Tiller, cooking whisk, a pot, a measurement container, a kitchen scale

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# Gelatine phantom

Step 1: create your tupperware

Your target can be filled with water or different food coloring and be positioned in a different ways

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# Gelatine phantom

- Make the mold:

Water: 1 L

Gelatine: 80 gr

Metamucil: 3 tbsp

Flour: 1 tea spoon

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# Tips and tricks

- Heat up the water until boiling. At this point stop heating in order to let the water stay warm but not bubbling.
- Add your ingredient, one by one, little by little, whisking all the time in order to avoid clumps
- Once all the ingredients have been well combined pour your gelatine into the mold

# Agar agar phantoms

## Materials:

- The mold: agar agar, Water, Metamucil, flour/food colorant
- The target: different type de balloons
- The container: 1 L tupper ware
- The tools: syringe, Razor Blade/Tiller, cooking whisk, a pot, a measurement container, a kitchen scale

# Agar agar phantoms

The mold:

- Water 750 ml
- Agar agar 40 grs (3 spoon)
- Target as needed
- 1 tea spoon of flour (or food colorant)



# Agar agar phantoms

## Tips and tricks

Mix cold water with agar, stir until agar is suspended without clumps, then briefly bring the mixture to boil.

Mix the flour/food colorant, trying to avoid clumping

Pour in the mold and let cooling for 20 minutes

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# Pericardiocentesis phantoms

Use gelatin or agar agar phantoms

2 L Tupperware

1 skeleton rib cages (amazon->Halloween skeleton)

2 water balloon (1 linear, one normal)

# Pericardiocentesis phantoms

Tips and tricks

Fix de linear balloon laterar to sternum (mammary artery)

Put the normal balloon fill with water in the tupper ware and inside the cage

Fill with gelatin/agar agar up to the top

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<https://www.ultrasoundtraining.com.au/resources/diy-ultrasound-phantom-compendium/>

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