



Patient Preparation in Cardiomyopathies

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General Patient Preparation

- Confirm patient history (type of cardiomyopathy, symptoms, family history, recent ECG or echocardiography).
- Screen for contraindications:
 - Pacemakers or ICDs
 - Metallic implants or foreign bodies
 - Claustrophobia
 - Renal function (for gadolinium contrast use)
- Check medications — beta-blockers or antiarrhythmics may impact heart rate or rhythm.

Informed Consent & Communication

- Explain the exam duration (usually 45–60 minutes).
- Emphasize the importance of breath-holds and keeping still during image acquisition.
- Discuss contrast injection (gadolinium), including the possibility of a brief cold sensation or temporary metallic taste during saline flush.

Positioning & Coil Placement

- Position the patient supine, head-first into the scanner.
- Use a dedicated cardiac coil, ensuring correct centering over the heart.
- Place ECG leads securely — aim for a strong, stable signal to trigger sequences.

Breath-Hold Training

- Rehearse short breath-holds (10–15 seconds) with the patient.
- Use clear, consistent instructions and confirm the patient's understanding before starting.



IV Access

- Establish venous access (typically in the antecubital fossa).
- Ensure the line is flushed and functioning before starting the exam.

Monitoring

- Use continuous ECG gating throughout the scan. Ensure good skin contact and adequate signal quality.
- Monitor blood pressure and oxygen saturation if clinically indicated, particularly in high-risk or symptomatic patients.

Reference:

Herzog, B. A., Greenwood, J. P., Plein, S., Garg, P., Haaf, P., & Onciul, S. (2017). Cardiovascular magnetic resonance pocket guide. *Eur Soc Cardiol*.