

Point of Care Testing: Activated Clotting Time (ACT)

UNIT: Interventional Radiology

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Clinical Indication

- Activated clotting time (ACT) testing for patients in interventional radiology (IR) will be done to determine the level of therapeutic anticoagulation achieved after the administration of heparin or after its reversal with protamine. Patients under consideration for endovascular procedures such as stenting, angioplasty, and embolization will be tested at the discretion of the attending radiologist performing the procedure.
- Tests performed by trained nursing staff.

Documentation

- All ACT results are recorded on the Patient Results form and scanned into the patient's medical record or entered directly into the patient electronic medical record.

Clinical Action

- Baseline ACT will be acquired on patients under consideration for an endovascular procedure.
- Post-heparinization ACT will be acquired 5 minutes after an initial bolus of heparin (typically 70 units per kg) has been administered IV.
- If post-heparinization ACT is double the baseline or between 250 and 300 seconds, then endovascular intervention will proceed. Half the initial bolus dose of heparin will be administered on an hourly basis during the procedure.

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- If post-heparinization ACT is less than double the baseline, then an additional weight-based dose of heparin will be administered and a repeat ACT will be performed after an additional 5 minute wait.
- If post-heparinization ACT is greater than 300 seconds, then less than half the initial dose of heparin will be administered on an hourly basis during the procedure at the discretion of the attending radiologist.
- A post-reversal ACT will be performed on all patients in whom heparin is reversed with protamine.