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Guidelines for Medication Administration for Cardiac CTA

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Division/Champion: Cardiothoracic Imaging/Blum/Winchester

Subject: Guidelines for Medication Administration for Cardiac CTA

Purpose: Provide general instructions for the administration of medications for heart rate control and vasodilation prior to performing a coronary CTA.

Policy: The target heart rate for cardiac CTA is 66 bpm or less. Communication with the Cardiac Team is required for any deviation of these guidelines.

Out-patient Cardiac CTA (Monday through Friday, 8AM – 5PM)

Out-patients scheduled for cardiac CTA are managed by our Radiology Department nursing staff. The nurse will administer the medications as per EPIC orders at the time of the scan. The cardiac team resident/attending will provide orders in EPIC for the following:

- **IV Metoprolol:** Dose: 5 mg q 5 min X 4, as needed for HR>66 bpm, prior to scan
- **Sublingual Nitroglycerine:** Dose: 0.4mg, 3-6 minutes prior to contrasted scan

In-patient Cardiac CTA (Monday through Friday, 8AM – 5PM)

In-patients scheduled for cardiac CTA are managed by our Radiology Department nursing staff. The charge technologist should contact Radiology Care Unit or nursing staff assigned to CT to discuss availability of nursing staff. The cardiac team resident/attending will provide orders in EPIC for the following:

- **IV Metoprolol:** Dose: 5 mg q 5 min X 4, as needed for HR>66 bpm, prior to scan
- **Sublingual Nitroglycerine:** Dose: 0.4mg, 3-6 minutes prior to contrasted scan

In-patient Cardiac CTA (Weekends/Holidays 8AM – 5PM)

Due to the non-emergent nature of these exams as well as the expertise required to obtain a diagnostic study and interpret the exam, this study is not typically offered after hours. In-patients scheduled for cardiac CTA on the weekend are to be managed by the hospital floor/unit nursing staff. *The ordering physician* will provide orders for beta blocker or other appropriate medication for heart rate control with a target heart rate of <66 bpm.

- Recommended Medication: 100mg oral metoprolol until target rate of 66 bpm is met
- SL NTG is not administered do to the lack of nursing services at the scanner during these hours

Emergency Department Cardiac CTA for Chest Pain

The emergency Department patient scheduled for cardiac CTA is managed by the ED nursing staff. The ordering physician will provide orders for beta blocker or other appropriate medication for heart rate control with a target heart rate of <66 bpm.