Guidelines for In-Patient Cardiac CTA

RPC Approval: April 2018
Next Review: April 2020
Division/Faculty: Cardiothoracic Imaging/Thoburn
Subject: Guidelines for In-Patient Cardiac CTA
Purpose: Indications and preparation of an inpatient scheduled for a cardiac CTA

Policy
As these are typically non-emergent exams and the expertise required to perform the imaging and interpret the study, inpatient Cardiac CTA are typically only performed between the hours of 8AM – 5PM on weekdays and weekend days.

Criteria for Cardiac CTA
Patient felt to be low to intermediate pretest likelihood of having coronary ischemia as a cause of their chest pain.

Appropriate Indications for Cardiac CTA
Chest pain in low to intermediate risk patient.
Patient with possible coronary anomaly.

Contraindications for Cardiac CTA
- Inability to hold breath or cooperate
- Cardiac CTA performed within the last year
- Increased cardiac enzymes, concerning for AMI
- Acute EKG changes, suggesting AMI
- Creatinine level > 2.0, if not on chronic dialysis
- Pregnancy
- History of severe contrast reaction
- Arrhythmia

IV Access (Please see IV Access Guidelines)
18g preferred, 20g min
Order of location preference: 1. Right AC; 2. Right mid forearm; 3. Left AC; 4. Left mid forearm.
All other locations are unacceptable for contrast bolus delivery for cardiac CTA.
Other lines or catheters must be approved by the Cardiac Imaging Team or the radiologist/resident on call.

Cardiac CTA Orders

<table>
<thead>
<tr>
<th>Weekdays: Monday through Friday: 8AM – 5PM</th>
<th>Medication Administration: Radiology Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac CTA EPIC orderable: CT Angio Cardiac Coronary Arteries IMG 12017</td>
<td>Beta blocker: IV metoprolol: up to 4 doses, 5mg each</td>
</tr>
<tr>
<td>Radiology will place orders in EPIC for IV metoprolol and sublingual nitroglycerine.</td>
<td>Administered by radiology staff RN just prior to scan until target rate of 66 bpm is met.</td>
</tr>
<tr>
<td>The in-patient scheduled for cardiac CTA is managed by radiology nursing staff.</td>
<td>Sublingual nitroglycerine: 0.4mg</td>
</tr>
<tr>
<td>CT charge technologist should contact Radiology Care Unit or the nursing staff assigned to CT to discuss availability of nursing staff.</td>
<td>Administered by radiology staff RN 3-6 minutes prior to contrasted scan.</td>
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<tr>
<td>Exam coordinated by CT charge tech and floor/unit nursing staff</td>
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</tbody>
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IV Access
(Please see IV Access Guidelines)
**Calcium Score**
- For calcium score values above 600, the contrasted portion of the scan may be canceled by radiology.
- The ordering physician will be notified of this change by the cardiac team or the radiology resident on call.

**Reporting of Results**
- **Weekdays**
  - Exam performed 0800 – 1700 hrs: Final report in EPIC
- **Weekends/Holidays**
  - Exam performed 0800 – 1700 hrs: Preliminary report in EPIC

<table>
<thead>
<tr>
<th><strong>Weekends: Saturday and Sunday; 8AM – 5PM</strong></th>
<th><strong>Medication Administration: Floor/Unit Nurse</strong></th>
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</thead>
<tbody>
<tr>
<td>Cardiac CTA EPIC orderable: CT Angio Cardiac Coronary Arteries IMG 12017</td>
<td>Medication is given on the floor until target rate of 66 bpm is met.</td>
</tr>
<tr>
<td>Ordering physician will place order in EPIC for appropriate medications for HR control, to achieve a HR 66 bpm during the scan.</td>
<td>The patient’s nurse will report to CT that the target rate is met.</td>
</tr>
<tr>
<td>Recommended beta blocker: 100mg oral metoprolol Until target rate of 66 bpm is met.</td>
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<tr>
<td>Exam coordinated by CT charge tech and floor/unit nursing staff.</td>
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</tr>
</tbody>
</table>