BMC2 Best Practice Protocol

Best Practice Protocol for the Blue Cross Blue Shield of Michigan Cardiovascular Consortium

BMC2 Best Practices For Documentation of a CTO PCI

Chronic total occlusion PCI cases should be well documented in the catheterization report and include the following elements:

1. **Indication/History/Reason for Procedure**
   - A clear indication for the procedure should be described
   - Describe any previous efforts to relieve symptom burden such as escalation of anti-anginal medical therapy or PCI of non-CTO lesions.
   - List whether there were prior attempts to open the chronically occluded artery.
   - If there was consideration for surgical revascularization, it is helpful to document this and why surgery was not pursued.
   - If there are features that increase the procedural risk or lower the chance for technical success, either lesion- or patient-specific, it is helpful to document this as well as any conversation with the patient regarding informed consent.

2. **Lesion Characteristics**
   - A brief description of the lesion is recommended.
     - A J-CTO score is helpful.
     - Additional descriptive characteristics that may be helpful:
       - Length of occlusion, calcification, ambiguity of the proximal and distal caps, quality of the distal vessel, source of collateral flow, and whether any collaterals are suitable as interventional crossing collaterals.

3. **Procedure Description**
   - List the location of access site(s), French size, and which site was used for antegrade work versus donor vessel visualization/retrograde work. If hemodynamic support is used, a rationale for use should be explained.
   - List a limited and ordered description of each method of crossing attempted, wires used, whether it led to progress in the case, and why it failed if unsuccessful.
   - If the procedure was stopped before procedural success was achieved, the reason for stopping the case should be stated. Examples may include: contrast limit reached, radiation limit reached, prolonged procedure time, patient agitation, patient instability, complication, procedure deemed unlikely to ultimately be successful, incomplete consent for more aggressive maneuvers, etc.

- If stents were placed, the brand, size, and location should be clearly listed. If only PTCA was performed, balloon sizing should be listed.
- If intravascular imaging (i.e. IVUS or OCT) was used, a description of what was seen on imaging and how this affected care should be provided.
- Final TIMI flow grade and percent residual stenosis should be stated.
- If there were complications during the case, how they were treated and the outcome must be described.

4. Recommendations

- Duration of antiplatelet therapy should be stated.
- Any additional medication changes should be stated. For example, risk factor modification may be escalated or anti-anginal therapy may be de-escalated after a CTO procedure.
- If the procedure was an “investment procedure” and additional work or relook angiography will be needed, a clearly defined timeframe and rationale should be listed.

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BMC2 Best Practice Protocols are based on consortium-wide consensus at the time of publication. Protocols will be updated regularly, and should not be considered formal guidance, and do not replace the professional opinion of the treating physician.