

PERI-OPERATIVE CARDIAC RISK REDUCTION PROTOCOL

Physicians: Check all boxes that apply. Sign and date after completion of each section.

Procedure Date: _____

Major Non-Cardiac Procedure (e.g., Thoracic, abdominal, major vascular, or joint replacement surgery):

PRE-OPERATIVE EVALUATION AND MANAGEMENT

****If protocol initiated in outpatient areas, please FAX form to Ambulatory Surgery Suite at 718-270-1244****

Surgeon or medical/cardiac consultant should initiate protocol. Anesthesiologist may initiate protocol, if applicable.

ASSESSMENT

Cardiac Risk Reduction Indications:

Any one of the following:

- Known coronary artery disease
- Atherosclerotic vascular disease
- Diabetes (insulin treated)
- Serum creatinine > 2 mg/dL
- Cardiologist recommendation

Contraindications to Beta Blockers: At least one of the following:

- History of adverse reaction/allergy to beta blocker
- Second or third degree AV heart block
- Acute bronchospasm (Caution with asthma or COPD)
- Congestive heart failure exacerbation
- Heart rate (HR) < 55 bpm
- Systolic blood pressure (SBP) < 100 mm Hg
- Acute hemodynamic instability

RECOMMENDATIONS

- **If patient not on a beta blocker, initiate metoprolol.**
 - If HR > 70 bpm, start metoprolol 50 mg PO BID.
 - If HR 60-70 bpm, start metoprolol 25 mg PO BID.
- **If patient unable to take oral agents, give metoprolol IV.**
 - If HR > 70 bpm: metoprolol 5 mg IVPB over 5 minutes.
 - If HR 60-70 bpm: metoprolol 2.5 mg IVPB over 5 minutes.
 - Repeat IV metoprolol q 10 minutes prn HR > 55 bpm.
- **If patient already on a beta blocker, optimize therapy.**
 - Continue outpatient agent **OR** change to metoprolol. **Titrate to HR 55-70 bpm.**
- **If patient has contraindication to beta blocker, consider clonidine or alternative strategies.**
Suggested regimen: Oral clonidine 0.2 mg night before surgery and morning of surgery **AND** clonidine patch (0.2 mg/24 hours) applied the night before surgery and to be worn for one week.

ACTION/PLAN

- Patient meets inclusion criteria for protocol. Beta blocker initiated or continued.
- Patient not identified to require perioperative cardiac risk reduction. Protocol is not required.
- Patient has contraindication to beta blockers.
- Clonidine initiated. (Contraindication to beta blocker.)
- Patient instructed to discontinue beta blocker s/he was taking.

MD Name: _____ **MD Signature:** _____ **Date:** _____

PERI-OPERATIVE MANAGEMENT (Holding Area, Operating Room, PACU)

If cardiac risk reduction protocol has NOT been initiated, anesthesiologist initiates protocol.

RECOMMENDATIONS

- Monitor HR and BP 15 minutes after IV beta blocker.
- If HR not at target 55-70 bpm,
 - in OR, order metoprolol or esmolol
 - in PACU, order metoprolol. (Give oral, if possible. If IV metoprolol ordered, dose every 6 hours).
- **Hold beta blocker if HR < 55 bpm or SBP < 100 mm Hg.**

ACTION/PLAN

- Intraoperative beta blocker ordered in Holding Area and/or OR.
- Intraoperative beta blocker not indicated.
- Postoperative beta blocker ordered in PACU
- Postoperative beta blocker not indicated or held in PACU.

MD Name: _____ **MD Signature:** _____ **Date:** _____

POST-OPERATIVE MANAGEMENT (Inpatient Unit, Discharge)

Continue beta blockers for minimum of 7 days post surgery (up to 30 days).

RECOMMENDATIONS

- Stop IV and switch to oral metoprolol if patient not NPO.
- Optimize oral metoprolol dose with target HR 55-70 bpm.
- **Hold beta blocker if HR < 55 bpm or SBP < 100 mm Hg.**

ACTION/PLAN

- Inpatient postoperative beta blocker ordered.
- Postoperative beta blocker held.
- Outpatient prescription for beta blocker given to patient.
- No outpatient beta blocker prescription.

MD Name: _____ **MD Signature:** _____ **Date:** _____