PERIOPERATIVE CARE

4) Sensory enhancement
5) Tight management of all
To prevent delirium the clinician must address:
(4) to decide additional evaluations
3
(5000 U. SC q 8 hours)
4) w/o
80% of predicted or personal
1  & < 3
Active cardiac
Low Risk Surgery
(4)
100 syst.)
Predicts poor outcome  if   PCo2 > 45 Severe COPD
Proceed with  planned Surgery
2) Medication evaluation and reduction
(4)
(MET >
visit GERI Pearls evv 8-15-12
(i.e. Deep breathing,
4 METS)
? -weight loss
Need for emergency noncardiac surgery?
No
Yes
To O. R.
Perioperative surveillance and postoperative risk stratification and risk factor management
Step 3
Active cardiac conditions? (a)
Yes
Evalu. & Delay Surgery.
Reconsider O.R.
Step 2
Low Risk Surgery? (a)
Yes
Proceed with planned Surgery
Step 3
“Good” functional capacity (MUT ≥ 8) w/o symptoms (a)
Yes
Proceed with planned surgery
Step 4
Poor or Unknown Functional Capacity
Evaluate Clinical Risk Factors (a) to decide additional evaluations (see next page or opposite side card)

CLINICAL RISK FACTORS

Clinical risk factors (4)
Noncardiac surgery?

Mandatory Perioperative Beta Blockade
Examples:
- metoprolol 5-20 mg IV 30 min. pre-op. 50 -100 mg q d for > 7day
- labetalol 100 mg q d pre-op and continue post-op.
- metoprolol 1 hr pre-op. then metoprolol q am on 1st postop day.
- bisoprolol start 2.5 mg/d 10 days preop. titrate to heart rate 50-70 BPM
- metoprolol start 25 mg/d, goal 25-100mg/if (see XL when possible)

- Initiation: > 24 hours preop. Best 7-30 days pre procedure
- Titrate to HR 50-70 BPM (and avoid if IPF ≤100 syst.)
- Use long-acting beta-blocker when possible.
- Continue postoperatively (Most protocols continue for at least 30 days post-op )
The majority of geriatric patients undergoing surgery will benefit from perioperative B-blockers
Intermediate vs High risk (Vascular surg.) with unknown or Poor Functional Status (< 4 METS)
Assess Clinical Risk (a)

Intermediate risk surgery
Vascular surgery

Add Perioperative Beta Blockade (a)
Only if perfusion
Noninvasive cardiac stress testing, if results change long-term management
Step 5

CLASSIC RISK CONDITIONS

Unstable coronary syndromes (ACS, recent MI (< 30 days prior)
Recent major cardiac surgery
Significant arrhythmias
Severe valvular disease (AS/MS with 40 mm Hg or 1.2 cm2 or symptomatic, MS with symptoms (DOE, syncop/ or tachy)
HF decompensated (NYHA IV) or new onset
ABG
DVT Prophylaxis

- Intermittent Pneumatic Compression device
- Thoracic and abdominal surgery
- Urging avoidance of NG’S as much as possible
- Warn patient to call in if developing URI

PERIOPERATIVE BETA BLOCKADE

Examples:
- Metoprolol 5-20 mg IV 30 min pre-op. 50 - 100 mg q d for > 7 days
- Labetalol 100 mg q d pre-op and continue post-op.
- Metoprolol 1 hr pre-op. then metoprolol q am on 1st postop day
- Bisoprolol start 2.5 mg/d 10 days preop. titrate to heart rate 50-70 BPM
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The majority of geriatric patients undergoing surgery will benefit from perioperative B-blockers

CLINICAL RISK FACTORS

Noncardiac surgery, EKG with abnormal Q waves, CHF-compensated, CVA, DM, CKD III.
Circulation October 10, 2007
For more explanation see: Web site: geriatrics.unmc.edu visit GERI Pearls evv 8-15-12

PULMONARY----Testing

Test Predictive value Indication
ABG Predicts poor outcome if PCO2 > 85 Severe COPD
PPV predicts post-op course in lung resection
evaluate for optimal bronchodilatation
Definition of optimal bronchodilatation:
Free of wheezing and peak flow (≥ 80%) of predicted or personal
Anticipate lung
Resection
COPD or Asthma

PULMONARY----Pre-op management:
Goal: Maximize lung function (this applies mostly to abdominal or thoracic procedures)
Management
- Bronchodilators, steroids (a)
- Weight loss
- Smoking quit weeks pre-op. in abdominal or thoracic procedures
- Warn patient to call if developing URI in immediate pre-op period
- Noninvasive cardiac stress testing, if results change long-term management.
- Perioperative Beta Blockade (Class IIa, LOE B)

DVT Prophylaxis

Surg. DVT Risk (a)
early amb (a)
ES IPC
dEB LEB LMWH
cWarfarin
Fig. 1
Low risk
Yes
Yes
Yes
Yes
Yes
Yes
High risk
Yes
Yes
Yes
Yes

DIC Peritonitis

1) Low Risk Surgery (class IIa, LOE B)
2) High Risk (class IIb, LOE B)
3) Unexplained hypotension
4) Spontaneous bacterial peritonitis
5) Portal vein thrombosis
6) Clotting abnormalities
7) Importantly, the clinician must address:
1) Risk factor assessment and modification
2) Medication evaluation and reduction
3) Environmental modification
4) Sensory enhancement
5) Tight management of all co morbid health factors