Ongoing Evaluation of the Impact of a Post-operative Atrial Fibrillation Prevention Protocol for Patients Undergoing Cardiothoracic Surgery

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Atrial Fibrillation is a common post-operative complication that may occur in up to 40% of patients following cardiothoracic surgery (CTS). It is caused by pre-existing degenerative changes to myocardium and perioperative conditions that alter electrophysiological parameters.

Per P&T approved protocol, all patients undergoing CTS will be initiated prophylactic medications post-operatively unless contraindicated. After extubation, patients will be switched to oral equivalents.

Amiodarone 150 mg IV bolus followed by amiodarone infusion 1 mg/minute x 6 hours then decrease rate to 0.5 mg/minute x 18 hours.

Metoprolol 5 mg IV every 6 hours, Hold for SBP < 100 or HR ≤ 60 or if currently paced via epicardial wires.

Ketorolac 30 mg IV every 6 hours x 48 hours while intubated reduce dose to 15 mg IV every 6 hours for CrCl 25-50 mL/min. Do not give ketorolac if patient is actively bleeding or CrCl < 25 mL/min.

Valvular aortic 12 (24) 30 (30) 9 (18)

Mitrval 6 (12) 21 (21) 5 (10)

Combined 6 (12) 10 (10) 5 (10)

Emergent 24 (48) 49 (49) 29 (58)

Utilization of Prophylactic Agents

Pre 74 78 72

Interim 84 86

Ad Hoc 44 64

Utilization of Prophylactic Agents

Utilization of Prophylactic Agents

Pre 88 (%) Amiodarone (%) NSAID (%)

Interim 3 3 3

Ad Hoc 8 8 8

Length of Stay

ICU LOS (days)

Pre 3 3 3

Interim 8 8 8

Ad Hoc 8 8 8

Hospital LOS (days)

Pre 8 8 8

Interim 8 8 8

Ad Hoc 8 8 8

CONCLUSIONS

• Incidence of POAF following CTS has reduced from 36% pre protocol to 22% post protocol with a relative risk reduction of 39%.

• Prescribing of amiodarone and NSAIDs through this protocol has continued to improve post protocol implementation.

• The number of protocol medications received is indirectly proportional to incidence of POAF.

• History of Atrial Fibrillation poses a major risk for POAF development after CTS.

DISCLOSURES

• The study contributors have nothing to disclose regarding any financial or nonfinancial relationships with the products described, reviewed, or evaluated in this presentation.

REFERENCES


2. Duran-Garcia T, Treasure T, Reddick RL, Alpert JS, Calkins H, Ellenbogen KA, Ezekowitz MD, Halperin JL, Huezey J, Januzzi JL, Kamarena Sankar, PharmD; Jonathan Kline, PharmD, BCCCP; Heidi Clarke, PharmD, BCCCP; Radhan Gopalan, PharmD, BCPS; Faaria Quadri, PharmD, BCPS; Baptist Hospital of Miami, Department of Pharmacy; Miami, FL.


5. Forrester JS, Williams CS, Alpert JS, Calkins H, Mancini DM, Handley BG, Fishbein MC, Blankenfeld JD, Epstein AE, Fleiss AS, Halperin JL, Ezekowitz MD, Halperin JL, Huezey J, Januzzi JL, Kamarena Sankar, PharmD; Jonathan Kline, PharmD, BCCCP; Heidi Clarke, PharmD, BCCCP; Radhan Gopalan, PharmD, BCPS; Faaria Quadri, PharmD, BCPS; Baptist Hospital of Miami, Department of Pharmacy; Miami, FL.