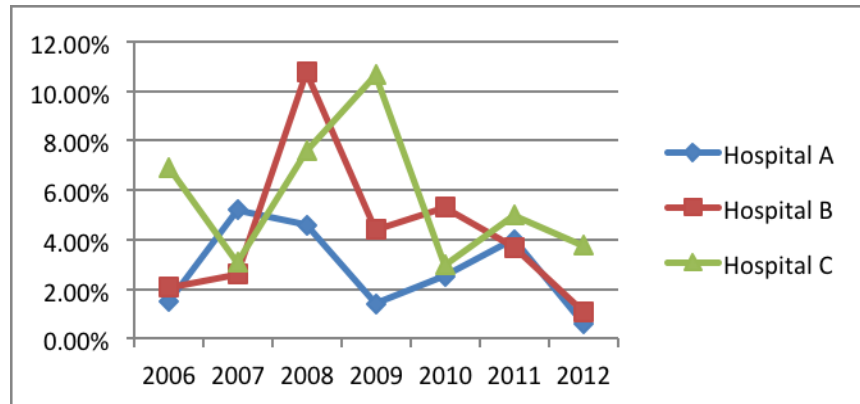




MSTCVS QUALITY COLLABORATIVE PROTOCOLS FOR PREVENTION OF POST-OPERATIVE RENAL FAILURE

The following protocols were developed and implemented by three MSTCVS Quality Collaborative adult cardiac surgery centers in Michigan.



GENESYS REGIONAL MEDICAL CENTER POST-OP RENAL FAILURE PREVENTION GUIDELINE

Bolus dose immediately after induction of anesthesia, before first surgical incision:
Sodium BiCarbonate 0.5mEq/kg/body weight diluted in D5%W (final volume = 250 ml) IVPB x1.
Infuse over 1 hour.

Maintenance dose: Continuous intravenous infusion of Sodium BiCarbonate 0.15 mEq/kg/HOUR diluted in D5%W (final volume = 500 ms) over 23 hours then STOP.

ST. JOSEPH MERCY HOSPITAL POST-OP RENAL FAILURE PREVENTION GUIDELINE

Intra-op and post-op BiCarbonate for use in patients with creatinine clearance < 60. Sodium Bicarbonate 150 mEq in 1000 ml D5%W infused at 0.5 cc/kg/hr with maximum of 50 cc per hour. Infusion may be discontinued after 24 hours in small patients with slower infusion rate depending on creatinine levels and other lab values.

Additional interventions used routinely on all patients at Hospital B include:

- Delay operation for at least 48 hours post cardiac catheterization
- Hold ACEi therapy 48 hours prior to surgery
- Avoid phenylephrine during cardiopulmonary bypass
- Intravenous hydration NOT diuresis on POD #1

SINAI GRACE HOSPITAL POST-OP RENAL FAILURE PREVENTION GUIDELINE

For all open heart surgery patients (no exclusion criteria) Begin infusion just prior to first incision in the OR

Sodium BiCarbonate 150 mEq in D5%W (final volume = 1L) Infuse 1ml/kg/hr body weight. Continue 24 hrs.

Check urine pH q 6 hr. Keep pH 6.5 – 7.0

Check serum bicarbonate q 6 hr. Keep bicarbonate 28 – 30

Check serum pH q 6 hr. Keep serum pH < 7.45