Day of Surgery

IV fluids:

- total IV fluids recorded, include both preoperative and intraoperative.
- fluid restriction may be necessary (risk of pulmonary edema), if magnesium sulfate is needed postoperatively.

Magnesium sulfate protocol, if needed: patient received 6 g IV load, then 3 grams IV per hour

- IV rate is generally run at 3 g/hr for one to three hours.
- IV infusion is then generally decreased to 3 g per hour for the next four to six hours, and then adjusted based on uterine activity (palpable contractions, not just contractions on toco) and IV post-op magnesium level from the lab. –
- would anticipate the patient to be on 2 -2 1/2 g/hr by 12 hours post-op.

* magnesium infusion is continued for a total of 24 hours.

* Important issues:

- watch the pulse oximeter for signs of pulmonary edema.
- watch urine output, because magnesium levels rise as urine output falls.
- watch for signs of magnesium toxicity such as slurred speech, visual changes (blurred or double vision), respiratory depression, hypoxia, absent reflexes or cardiac arrhythmia.

Indomethacin: patient receives 50 mg orally preoperatively.

- postoperatively receives 50 mg per rectum every six hours for three

additional dosages (total of **four** in 24 hours).

Antibiotics: patient receives 1 g Ancef or 900 mg clindamycin (if penicillin allergic) preoperatively.

- postoperatively, patient receives 1 g Ancef IVPB every eight hours for a total of four doses in 24 hrs, or 900 mg clindamycin IVPB every eight hours for a total of four doses in 24 hours.

Pain management: epidural PCEA

Drains: Foley catheter to dependant drainage.

Surveillance: continuous toco for uterine irritability/contractions, fetal heart rate checks every four hours, follow-up post-operative fetal echocardiogram.

Activity: strict bedrest and bilateral lower leg compression boots.

Key Points:

- Fluid restriction
- watch pulse oximeter O2 saturations
- watch urine output
- sequential decrease in magnesium sulfate infusion postoperatively (6 and 12 hour post-op magnesium levels)

Post-op Day #1

IV fluids: total IV fluids restricted to 100 cc/hr.

- fluid restriction is necessary because of the risk of pulmonary edema in first 48 hours postoperatively.

Magnesium sulfate: magnesium sulfate is generally discontinued after a total of 24 hours unless there are persistent palpable contractions.

Nifedipine: start nifedipine 60 to 90 minutes after the magnesium sulfate has been discontinued. Important to wait because cardiovascular collapse has been recorded when magnesium sulfate and nifedipine are used in combination. Starting dose of nifedipine is 20 mg every six hours or 10 mg every six hours if maternal systolic BP <95. Nifedipine dose can be increased to every four hours if palpable contractions are documented on the every six hours dosing.

Indomethacin: after completing the 4 doses of 50 mg, the patient is then changed to 25 mg orally every six hours for a total of four doses in 24 hours during POD #1. **Antibiotics**: antibiotics are discontinued after completing the four postoperative dosages on DOS.

Pain management: epidural PCEA

Drains: Foley catheter to dependant drainage

Surveillance: continuous toco for uterine irritability/contractions, fetal heart rate checked every four hours, follow-up post-operative ultrasound and echocardiogram.

Diet: After noon, the patient can be offered ice chips based on degree of nausea. If the patient tolerates ice chips through the afternoon, can be offered clear liquids in the evening and can increase oral intake ad lib.

Activity: strict bed rest bilateral lower leg compression boots should be continued.

Key Points:

- magnesium sulfate discontinued after a total of 24 hours.
- nifedipine starts no sooner than 60-90 minutes after the magnesium is discontinued.

- ❖ Indomethacin doses change from 50mg PR to 25mg orally every six hours.

Post-op Day #2

IV fluids: if patient tolerating clear liquids, IV access can be hep-Iocked.

Nifedipine: Nifedipine dose continues at 20 mg every six hours or 10 mg every six hours if maternal systolic BP <95. Nifedipine dose can be increased to every four hours if palpable contractions are documented on the every six hours dosing. Indomethacin: after completing the four doses of 25 mg, the indomethacin is discontinued.

Pain management: epidural is discontinued and the patient is changed to oral pain medications.

Drains: Foley catheter is discontinued once the epidural catheter is removed. Surveillance: continuous toco for uterine irritability/contractions, fetal heart rate checks every shift, follow-up post-operative ultrasound evaluation.

Diet: If the patient tolerates clear liquids, diet can be advanced to regular and consideration should be given to issues of bowel function (colace).

Activity: bilateral lower leg compression boots should be continued when in bed. After epidural has been discontinued and Foley catheter removed, the patient should begin progressive mobilization, usually starting with sitting up in bed for several hours, followed by sitting on edge of bed and dangling legs and eventually when ready walking to the bathroom with assistance.

KeyPoints:

- ❖ patients commonly experienced dizziness and palpitations during the first one to two weeks of nifedipine treatment. As such, need to be aware of this when initiating mobilization on POD #2.

- patient should be started on oral pain meds as well as colace (100mg twice daily) as they are very prone to constipation secondary to inactivity and pain medications.

Post-op Day #3

IV fluids: IV access hep-locked.

Nifedipine: Nifedipine dose continues at 20 mg every six hours or 10 mg every six hours if maternal systolic BP <95. Nifedipine dose can be increased to every four hours if palpable contractions are documented on the every six hours dosing.

Pain management: oral pain medications.

Surveillance: uterine toco for patient complaints of or nurse's assessment of irritability/contractions on exam, fetal heart rate checks every shift, follow-up post-operative ultrasound evaluation.

Diet: patient should be on regular diet by this time.

Activity: bilateral lower leg compression boots should be continued when in bed. Expectation would be the patient is walking to the bathroom without assistance by end of the day. Patient may also shower if using a shower chair and someone should be available to assist if necessary.

Key Points:

- patients commonly experienced dizziness and palpitations during the first one to two weeks of nifedipine treatment. As such, need to be aware of this when patient begins to walk to the bathroom and during showers.

- patient should be on oral pain meds as well as colace (100mg twice daily),
- need to coordinate housing plan for next day's discharge.

Post-op Day #4

IV fluids: IV access discontinued.

Nifedipine: Nifedipine dose continues at 20 mg every six hours or 10 mg every six hours if maternal systolic BP <95. Nifedipine dose can be increased to every four hours if palpable contractions are documented on the every six hours dosing. Pain management: oral pain medications. Surveillance: uterine toco prn for patient complaints only or nurse's assessment of irritability/contractions on exam, fetal heart rate checks every shift, follow-up post-operative ultrasound evaluation. Diet: patient should be on regular diet. Activity: Expectations would be the patient is walking to the bathroom without assistance. Patient may also shower if using a shower chair, and someone should be available to assist if necessary.

KeyPoints:

- anticipated Day of Discharge, but patient must be contraction free, on regular diet, in good pain control, ambulating without assistance, has at least passed flatus, has a normal ultrasound evaluation and has a support person and housing arranged.
- patient should be discharged with prescriptions for oral pain meds, nifedipine, a daily prenatal vitamin, as well as an iron supplement and colace (l00mg twice daily) for two weeks.
- patient needs to be scheduled for weekly follow-up ultrasound and prenatal visits.

- activity restrictions, medication schedules and signs/symptoms of postoperative complications (such as contractions, bleeding, fluid leakage, fever, wound complication and decreased fetal movements) need to be reviewed and written discharge instructions given to patient as well as where to call (SDU) if questions arise.