Admission Orders:

- **A**dmit to Neurosurgery under…
- **D**iagnosis
- **D**iet
- **A**ctivity
- **V**itals (specify neurovitals signs frequency)
- **I**nvestigations; **I**maging, **I**V, **I**ns/Outs
- **D**rugs

For significant head injuries:

- NPO, bed rest, NVS q1h
- Give meds to avoid hypertension
- When at risk to hurting self, due to agitation: consider Nozinan 6.25-12.5 mg iv/im/po q1-2 h prn so long as long as you can rouse the patient to examine him/her
- Follow-up serial CT scans according to the rule of 2's (2 days, 2 weeks, 2 months post-injury looking for↑ mass effect, hydrocephalus) and immediately if neurologic deterioration.

Pre-op Checklist

- **A**ntibiotics - Ancef 1g IV (if allergic, Vancomycin 1g IV) on call to OR for all surgical patients
- **B**lood work: CBC, lytes, BUN, Cr, INR/PTT, type/screen or X-match (depending on type of surgery)
- **C**onsent for surgery/embo and blood products - should be done by neurosurgery resident
    - Discuss treatment options and pros/cons.
    - Describe proposed intervention (pts often concerned about cosmetics i.e. incision location/scar, hair shaving).
    - Discuss rationale and benefits of proposed intervention.
    - Discuss general risks – anaesthetic, infection, bleeding.
    - Discuss specific risks that are relevant to the procedure – neurologic/endocrine injury/worsening associated with intervention, treatment failure, CSF leak,… coma, death.
    - Discuss post-operative medical risks – infections, drugs rxns, DVT/PE, electrolyte disturbances
    - Consent for blood products (given only when necessary)
- **D**examethasone (10mg IV the night and morning prior to surgery, depending on the type of surgery)
- **E**verything else (EKG, CXR depending on pre-morbid
- **F**ood (i.e. make NPO), films available
- **G**ang (ensure patient/family, OR aware)
- **H**ibitane shampoo (time permitting; night before)

Post-op Admission Orders

- NPO ->SIPS ->DAT
- Bed rest
- HOB 30 degrees (depending on surgery)
- NVS q1h
- Foley, I/O
- CBC, lytes, BUN, Cr daily in NICU
- IV NS ± KCl (consider D5NS in diabetic)
- Cefzolin 1g IV q8h x 3 doses
- Gravol 25-50 mg iv/po/im q4-6h prn
- Ondansetron 4-8mg PO/IV q8h prn
- Neuro bowel protocol
- Labetolol / hydralazine 5-10 mg iv q10 min to maintain SBP < 150 (may adjust based on surgery and premorbid HTN)
- Order pre-op meds (hold anti-hyperglycemics until eating, avoid iatrogenic hypotension with bp meds)
- Standard analgesics
    - Tylenol pl or #3 i – ii tabs q4-6h prn
    - Morphine 5-10 mg sc/im q3-4h prn
    - Morphine 1-2 mg iv q1h prn
- Other considerations depending on surgery
    - Decadron 4 mg iv/po q6h and then taper (eg. 4mg bid x 2d; 2mg bid x 2d; 1mg bid x 2d)
    - For Aneurysmal SAH
        - Avoid HTN (see labetolol/hydralazine orders above)
        - Keep well-hydrated
        - Continue Nimodipine 60 mg po/ng q4h
        - Continue Pravastatin 40 mg po daily
    - For Epilepsy surgery
        - As above but may do type/screen and no dexamethasone
        - Obtain drug levels
        - Anti-convulsant meds with sips at 0600hrs
    - For Parkinson's disease Surgery (Dr. Honey)
        - No sedation (Functional fellow can help you with these patients)
        - Refer to Dr. Honey's website for specific orders
    - For high grade glial neoplasm post-craniotomies
        - CT +/- Contrast POD #1
    - For AVM surgery
        - Prevent normal pressure perfusion breakthrough (results in swelling/hemorrhage) by avoiding hypertension
        - Keep SBP < 140 systolic
    - For Pituitary surgery
        - Monitor I/O and if U/O > 250 cc for 2 consecutive hours and then draw STAT lytes, and if Na > 145 then call MD.
        - May need steroids post-op depending on endocrinologist