**BC/WC ICU Training Case Systems-Based Plans**

Case #1: Laurel Rodgers

* Day 1
  + Neuro/Pain: She has a right subdural hematoma seen on trauma head CT. Neurosurgery is following and wants a repeat head CT at 4 hours, which will happen in one hour. She has been sedated, so we will need to lighten her sedation in order to get a better neuro exam after she comes back from CT. For pain she has a fentanyl which appears to be working well.
  + CV: She has a history of afib, well controlled on 25mg metoprolol, currently in normal sinus rhythm. We’ll continue to monitor with telemetry.
  + Pulm: She is intubated and ventilated. Her gases are 7.4/40/25/98. PEEP is 8, tidal volume is 360, FiO2 is 50%, and rate is 10. Chest was clear on AM chest XR and her ET tube is in place. We’ll plan start trying to wean her vent when we get back from CT and do spontaneous breathing trials when ready—at least one ach day.
  + GI: Abdomen is soft and non-distended. Trauma CT found no injuries. She has an NG-tube in place. No diet or tube feeds yet, but OK to give meds through the tube. Monitor for bowel movement.
  + Renal/GU: No acute issues or injuries. A foley was placed in the ED and she has been making good urine. We’ll continue to monitor and get the foley out as soon as we can.
  + Heme: Borderline anemic on labs this AM, but hemodynamically stable and no signs of bleeding except for her head. No transfusion needs at this time; continue to monitor. She takes warfarin at home; her INR in the ED was 4.0 and has since come down to 1.5 after she received 2 units of FFP for reversal.
  + ID: She’s been afebrile. White count is elevated likely secondary to trauma and not infectious, but we’ll continue to monitor.
  + Endo: History of hypothyroidism, 0.5 of levothyroxine. Continue for now.
  + MSK: For her facial fractures, plastics is consulted and they will see her in a few days to discuss operative treatment when the swelling goes down. She has a right arm and right hip fracture which orthopedics has evaluated and found to be non-operative. They are going to place a split today for her right arm.
  + Prophylaxis: Given her brain bleed we are holding anticoagulation and prophylaxis for now. We’ll keep her on a PPI for now while she is intubated.
  + Outlook: For outlook, her GTOS gives her a 14% risk of mortality and 17% chance of discharge to a SNF, LTAC, or hospice. **Based on your experience, what can we expect if everything went as well as we could hope for?**
* Day 2
  + Neuro/Pain: For Neuro, she went to the OR this morning for decompressive craniotomy with neurosurgery due to worsening subdural hematoma with mass effect. She tolerated the procedure well and was returned to us this morning. Neurosurgery is involved for wound care and ICP monitoring. Pain appears well controlled.
  + Prophylaxis: So for prophylaxis we are continuing to hold anticoagulation, and we’ll continue her PPI while intubated.
  + Outlook: For outlook, her GTOS on the day after admission gave a 14% mortality risk and a 17% chance of discharge to SNF, LTAC, or hospice. **Today, based on your experience, what can we expect for Ms. Rodgers if everything went as well as we could hope for?**
* Day 3
  + Neuro/Pain: For neuro, her ICPs have remained stable and she hasn’t required any interventions since coming back from the OR yesterday. We were able to wean the sedation but she became very agitated. Labs are within normal limits and EKG doesn’t show seizure activity. She is CAM ICU positive, consistent with ICU delirium. We’ll continue to monitor this, try to regularize sleep/wake cycles, and try to consolidate medications to reduce the number of times she gets woken up and stimulated throughout the day.
  + Prophylaxis: Ok for prophylaxis we are still holding her anticoagulation until we get the OK from neurosurgery to restart. We’ll continue her PPI for now too.
  + Outlook: Now for outlook. Again, her GTOS after admission showed a 14% mortality risk and a 17% chance of discharge to SNF, LTAC, or hospice. **Based on your experience, what can we expect for Ms. Rodgers if everything went as well as we could hope for?**

Case #2: Yara Lopez

* Day 1
  + Neuro/Pain: For neuro, she has a moderate sized frontal epidural hematoma without mass effect seen on trauma head CT. This was stable on repeat CT scan. Neurosurgery is following and have no recommendations except for holding anticoagulation for now and to let them know when we are lightening her sedation so they can do a good neuro exam. Her pain is well controlled with fentanyl.
  + Prophylaxis: Holding heparin, starting PPI while intubated.
  + Outlook: For outlook, her GTOS shows a 30% risk of in-hospital mortality and a 29% chance of discharge to SNF, LTAC, or hospice. **Based on your experience, what can we expect for Ms. Rodgers if everything went as well as we could hope for?**
* Day 2
  + Neuro/Pain: For neuro, she was not able to move her arms or legs with the sedation almost completely turned off, and so we got an MRI brain which showed several areas consistent with ischemic stroke and stable frontal epidural hematoma. Neurosurgery is aware and will have recs for us soon.
  + Prophylaxis: Holding anticoagulation, continuing PPI.
  + Outlook: For outlook, her GTOS on admission showed a 30% risk of in-hospital mortality and a 29% chance of discharge to SNF, LTAC, or hospice. **Based on your experience, what can we expect for Ms. Rodgers if everything went as well as we could hope for?**

Case #3: Yara Lopez—continued

* Day 10
  + Neuro/Pain: For neuro, she continues to have strength deficits in her arms and legs from her strokes. EEG showed no more seizure activity. We’ll continue her Keppra for now. Pain is not well controlled; we will switch her to dilaudid for longer lasting pain control since her hemodynamics are still ok.
  + GI: For GI, she is diffusely peritonitic and distended, worsened from yesterday. An upright chest film showed air under the diaphragm consistent with a perforated viscus. We will discuss with family and plan for the operating room.
  + Prophylaxis: Holding heparin for now given likely trip to the OR; continue PPI.
  + Outlook: For outlook, her GTOS on admission showed a 30% risk of in-hospital mortality and a 29% chance of discharge to SNF, LTAC, or hospice. **Based on your experience, what can we expect for Ms. Rodgers if everything went as well as we could hope for?**