The Problem

- Endovascular repair of the thoracic aorta is a procedure that requires placement of a lumbar drain by the anesthesia team preoperatively for management of postoperative spinal cord ischemia
- Lumbar drains are placed only rarely by anesthesiologists
- Teams called emergently, during off hours or even during the day, may be unfamiliar with the lumbar drain kit, the procedure of placing the drain and the management of the drain
- Transfer of the patient to the CVICU nursing teams has been problematic and has led to significant delays for nurses accepting these patients and possibly compromising care

Aim/Goal

The goal of this project was to provide the Anesthesiologist with a visual guide to quickly familiarize them with the placement and setup of the lumbar drain. A secondary aim was to clarify the nursing concerns in receiving the patients directly from the operating room and to facilitate transport and care in an efficient and safe manner.

The Team

Riki Kveraga, MD - Anesthesia Attending
Rohesh Fernando, MD - Anesthesia Resident
Feroze Mahmood, MD - Director of Vascular Anesthesia
Barbara Regan, RN - CTIC Nursing Director

The Interventions

- Assembled lumbar drain and CSF drainage kit and took pictures of key points
- Created a poster with images describing the placement and setup of the lumbar drain and CSF collection kit highlighting areas of known confusion
- Reviewed CVICU nursing protocols in caring for patients with lumbar drains

The Results/Progress to Date

A poster has been created describing the placement of a lumbar drain and setup of CSF drain kit to be displayed in the vascular operating room area.

Lessons Learned

- The method of handing off a patient from the OR to the ICU RN can lead to a lengthy delay in optimal care of the critically ill patient
- Numerous teams are involved in the care of a patient with a lumbar drain at time of hand off from OR to ICU
- Nurses are not allowed to operate the drain in the same capacity as physicians, which can sometimes make it difficult to determine if a drain is operating properly. Furthermore, nurses often have difficulties finding a doctor to troubleshoot a non-functioning drain.

Next Steps/What Should Happen Next

- Determine ideal method of hand-off of patients with lumbar drains to the CVICU nursing team.
- Education of core Vascular Anesthesia team members about presence of poster and ideal method of handing off patient with lumbar drain in CVICU
- Determine which team member in OR will be responsible to request anesthesiologist to convert to the preferred lumbar drain setup for handoff in CVICU

For more information, contact:
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