

## Intraparenchymal Catheter

### Supplies:

- PPE- non sterile gloves
- Sterile towels
- Ventricular drain tray and drill (packaged together and located on supply cart near Bay 1)
- Hair clippers (locked in cupboard in supply room near Bay 1)
- Microsensor ICP catheter (on supply cart near Bay 1)
- Codman ICP Express monitor and cable (locked in cupboard in supply room near Bay 1)
- Tegaderm dressing
- Lidocaine
- IV pole

### Procedure:

- Perform hand hygiene and don non sterile gloves
- Place ICP Express on IV pole (separate from articulating arm), plug in to red electrical outlet
- Connect Codman Microsensor transducer cable to front of the ICP Express
- Connect pressure cable to P3 on Datex monitor and then to back of ICP Express
- Turn on machine, listen for audible tone  
Press Menu/Enter on ICP Express to zero Datex monitor
- Zero Datex monitor as per usual practice; ensure "0" shows on the Datex monitor
- Press 20 button on ICP Express, ensure 20 scale displayed on Datex monitor (an acceptable range to appear is 19-21)
- Press Menu/Enter on ICP Express and connect Codman Microsensor ICP catheter to cable
- Place the tip of the Codman Microsensor ICP catheter **flat** into 3 inches of sterile water using the plastic tray. **DO NOT PLACE CATHETER TIP IN VERTICALLY**  
Press the zero key on the Codman ICP Express monitor
- Once zeroing is complete, a 3 digit number will display on the ICP express monitor
- Write this number in black marker on the white connector and in the patient's kardex
- Press menu/enter
- Catheter can now be inserted by MD. Once inserted, ICP reading will appear on the ICP Express and on the Datex monitor with a waveform

- Remove non-sterile gloves and perform hand hygiene
- Document

**Please note the following:**

- An LCD switch is located on the back of the ICP Express to see screen in the dark
- Alarms are automatically off when ICP express is turned on. To activate alarms go to menu/enter button, choose on/off alarm limits option and activate alarm option by arrowing up or down for required limits.

**Troubleshooting**

- When zeroing the ICP Express monitor, if the value -99 appears this means the grey cable that connects to the front of the ICP Express monitor needs to be replaced
- If a zero reference number appears before zeroing, turn ICP Express off and
- restart steps

**Traveling**

- Disconnect catheter from grey cable attached to ICP Express
- When reconnecting catheter to ICP Express, the reference number on the monitor must match the number written on the catheter. Either accept the displayed reference number (if they match) or adjust. Go to menu/enter and use arrow key to choose the correct reference number

**MRI and intraparenchymal catheters-see attached PDF file**

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