

UHS RSCH ICU Neurosurgical Prompt Cards

BIS (Bispectral Index) use in Critical Care

Covidien BIS Monitor Set Up

A BIS monitor must be in place to ensure patients have adequate analgesia and sedation prior to administration of neuromuscular blockade

Equipment needed:



- Covidien BIS Monitor – found in equipment cupboard
- Monitor interface and Patient interface (PIC) leads attached to monitor
- BIS Sensor probe – BIS Quatro - stored above BIS monitor

Sensor patient application:

If aware of localised brain injury attach sensor to opposite side

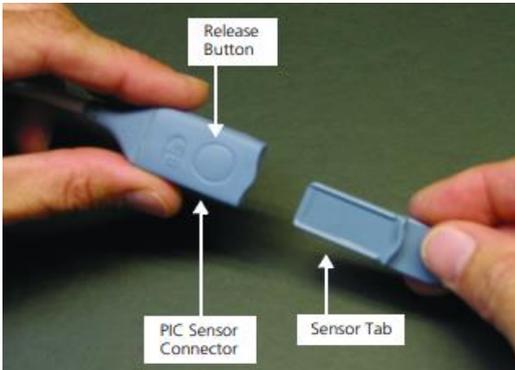
- Wipe skin on forehead with alcohol and dry
- Position sensor diagonally on forehead as follows:
 - Sensor 1 - At centre of forehead
 - Sensor 4 - Directly above eyebrow
 - Sensor 3 – On temple between corner of eye & hairline
- Press edges of sensor to ensure adhesion
- Press 1,2,3 & 4 for 5 seconds
- Insert sensor into patient interface cable

- Press the On/Standby button on bottom right - initiates a self-check

ON/Standby Button

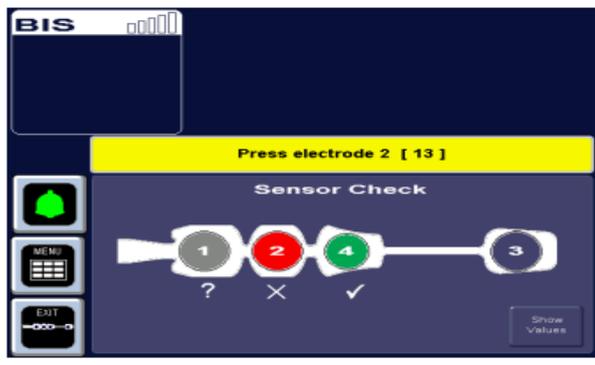


- Attach sensor to patient interface cable - audible click should be heard



- Sensor integrity check initiated by monitor
- When sensor passes check main screen displays and monitoring begins

Sensor integrity check failed



- Hollow circle – no status available
- Green circle with tick – when all circles are green monitoring will start
- Red circle with X – electrode impedance not within range. Check edges of sensor for adhesion & check all connections. If persists then remove sensor, clean skin and reapply or try new sensor
- Grey circle with ? - Electrical interference from another source

NB: Change sensor every 24 hours to reduce risk of skin damage

Return monitor and cables to equipment store when finished monitoring.