

Background:

There are some skills and knowledge required for the management of intrathecal medication and pumps, which are highly specialised and specific to the Pain Unit.

Staff working in this area need special training and supervised experience over a period of time, before being considered proficient in this management.

Relievers working in this area would not be expected to have any input into this management, unless they have been working in the area for some time and have been through the accreditation process.

Required Knowledge:

- 1) Spinal anatomy and pathology
 - Detailed knowledge of the anatomy of the spine, epidural and intrathecal space
- 2) Knowledge of commonly used medications
 - Doses used in the diagnostic phase and for long-term management
 - Desired effects
 - Common side effects and how to manage them
 - Implications and management of underdose and overdose
 - Withdrawal signs and symptoms of each of the different medications used (opioids, local anaesthetics, baclofen etc)
 - Common medication combinations and the reasons for their use and the calculation of daily dosing
 - Advice to medical staff outside of the hospital regarding management of our pump patients and provision of appropriate information and documentation when patients having surgery or travelling overseas
- 3) Knowledge of the types of intrathecal devices and pumps used (both internal and external) and the possible problems which can occur with accessing each
- 4) Experience with accessing each of the different kinds of devices
 - Epidural and intrathecal port-a-caths
 - Gas-driven Isomeds
 - Computer programmable Synchromeds (EL and Synch II)
- 4.1) Side port accessing for CSF sampling
- 5) Knowledge of the possible complications (both short term and long-term) associated with each kind of device

- 6) Knowledge of the computer programming required for the SynchroMed pumps
 - Simple continuous dosing
 - Flexi dosing
 - Bridge bolusing
 - Stall interrogation
 - Trouble-shooting problems
- 7) Education of patients prior to implantation of devices, including information about the surgery as well as the complications and ongoing management
- 8) Assessment of each of our device implant patients with regard to any need for medical intervention - which patients need medical review and when (urgent or routine)
- 9) Keeping up to date with alerts generated by Medtronic in relation to problems and checking for the need to recall or alert patients
- 10) Reporting any problems or hazards with devices to Medtronic as well as documenting on SLS and liaising with other Pain Units if appropriate

Required Experience:

As the administration of epidural and intrathecal medications must be checked by 2 registered nurses, there should always be an experienced staff member present as one of the checkers

Staff undergoing training will then need to observe several of each type of procedure before attempting to carry out the procedure themselves.

- 1) Observation of another experienced staff member
 - Each of the devices
 - o The accessing and refilling procedure
 - o The computer /device programming
- 2) Under direct supervision
 - Accessing and refilling of each type of device
 - Reprogramming as required
- 3) Trouble shooting problems associated with management

Accessing the appropriate knowledge and documenting accreditation:

- 1) Moodle site (in development)
- 2) Learning package (in development with the company – Medtronic)
 - There are some manuals available which are currently kept in Pain Unit, but there is an on-line programme being developed by the company
- 3) Direct learning on site
- 4) Attendance at workshops run by Medtronic, if any new variations in equipment occur