There are some disadvantages to this method of treating spasm, the most notable being:

- Failure of the pump, or dislodging of the catheter from the subarachnoid space requiring further surgery to rectify the problem.
- Overdoses of Baclofen – in rare and extreme cases can cause breathing difficulties.

If you would like any further information please contact:

Spinal Outpatient Services on 01296 315829

or

St Patrick Ward on 01296 315812
BACLOFEN PUMPS

In cases of severe spasm large oral doses of anti-spasmodic medications may be required to achieve any degree of relief from the symptoms. As a result, the patient often suffers from the side effects of the drugs as they cross from the blood into the central nervous system, i.e. drowsiness and fatigue.

The technique of introducing an anti-spasm drug such as Baclofen directly into the space surrounding the spinal cord via a small catheter connected to a reservoir pump is employed in an attempt to avoid the above problems. As the drug can be delivered directly into the central nervous system without having to pass through other bodily organs it can be given in a far smaller doses. The patient benefits from a more constant level of relief both day and night as the drug is released on a continuous basis by the pump.

The actual size of the pump is approximately 7cm in diameter and 2.5cm in depth.

The Surgery

The insertion of a baclofen pump will only be undertaken following a thorough assessment of the patient’s spasms and usually after most other treatments have been tried. The medical staff at this centre will investigate how much relief is gained from a one-off “test dose” of intrathecal baclofen given via a lumbar puncture needle into the space surrounding the spinal cord below T12. The implications of the surgery will be fully discussed with the patient.

Preceding the surgery the patient will have been on a reducing dose of baclofen. When the surgery is agreed upon the patient is admitted for a hospital stay of 2-3 weeks. The operation itself lasts 1-2 hours. Following the surgery the patient is nursed lying flat for 48 hours. The patient will have two suture lines, one abdominal, where the pump (drug reservoir) is implanted subcutaneously (under the skin), the other is in the lumbar spine area where access is made to pass the catheter.

A sophisticated computer is used to program the pump post-operatively. The dose released by the pump can be adjusted to reduce muscle spasms to a tolerable level.

A short course of physiotherapy may be needed to reassess and possibly improve upon skills such as transfers now that the patient does not have to compensate for the spasms.

After Discharge

Following discharge the patient will return to Spinal Outpatients on a regular basis to have the reservoir refilled. This can vary from 6 weekly to 3 monthly depending on the dosage required and the type of pump. In general, from trials to date, patients appear very satisfied with their pumps and report great improvement in their spasm and often an increase in their level of independence.

There are two types of baclofen pump, a computerised battery operated version, and a gas chamber version. The computerised battery operated pump is usually used as the drug dose and frequency of drug delivery can be altered more finely to meet the patient’s needs. This pump has to be replaced every 5 years.

The Gas pump is a fixed rate delivery pump, which can last for life, as it is not battery driven. However it has to be refilled every 6 weeks and it is not as versatile as the computerised battery pump.

Overall baclofen pumps appear to be a valuable addition in the treatment of severe spasticity and some patients have reported other benefits such as improvement in bladder function and relief of pain.