Pump for curing spasticity

KMCH in the city has recently introduced the concept of an intrathecal baclofen pump for spasticity. The procedure for insertion of an intrathecal baclofen pump lasts 1-1.5 hours. The pump is inserted under the covering of the abdominal muscles while the patient is under a general anesthetic. A small catheter is inserted through a needle into the spinal fluid and is threaded upward toward the neck. The catheter is tunneled under the skin to the abdomen and is connected to the pump. The pump is filled with the drug baclofen and is programmed by a computer to continuously release a specified dose that is determined by the physician. It is sufficient to fill this pump once in a year.

The baclofen pump was inserted recently on Sankaran, who had spastic weakness of arms and legs due to primary lateral sclerosis for more than 10 years. Spasticity is a common debilitating neurological condition. It is a motor disorder characterized stiffness and painful spasms in arms and legs. It results from velocity-dependent increase in tonic stretch reflexes with exaggerated tendon jerks, resulting from hyperexcitability of motor neurons. It is caused by stroke, motor neurone disease, spinal cord injury and cervical myelopathy to name few.

The effectiveness of medications vary between individuals, and also on location of lesion (in the brain or the spinal cord). Surgery could be required for a tendon release in the case of a severe muscle imbalance leading to contracture. Although these procedures are available neurologists are faced with increasing challenge to deal with this condition.

Arul Selvan, consultant neurologist and Ram Narayanan, visiting consultant neurosurgeon at KMCH have done this operation first time in Coimbatore.