**Clinica para o Tratamento da Dor-**
**Hospital das Clinicas- FMRP-USP**
***Excellence in Pain Practice Award for Comprehensive Multidisciplinary Pain Practice***

# SPINAL CORD STIMULATION IMPROVES VESICAL AND BOWEL ACITIVIES IN DISABLING PATIENTS

**Gabriela R Lauretti*, Sara S Pedrão, Raquel de Oliveira, Veridiana Zucolloto, Anita L Mattos, Marcelo Antunes**
**Department of Biomechanics, Medicine and Rehabilitation of Locomotor Members**
**School of Medicine of Ribeirão Preto- University of São Paulo- Brazil**

**Objectives-** Spinal cord stimulation (SCS) implantation is the procedure of choice for disabling intractable neuropathic pain. However, although studies focus on pain processing, we evaluated the influence of SCS device on visceral activities after its percutaneous implantation.

**Method-** After ethics approval, 9 patients with intractable neuropathic pain associated to limbs disability and some degree of vesical and bowel incontinence were included. All patients were implanted with percutaneously with SCS (Medtronic®) at thoracic level under local anesthesia and conscious sedation. Patients rated their vesical and bowel abilities apart from neuropathic pain as: 1) same, 2) improved, 3) worsened. Improvement was considered as at least 50% improvement over basal data. Food digestion impression was also evaluated.

**Results**- All patients classified their vesical and bowel daily activities as much improved (60-90%), associated to improved food digestion ($p<0.05$). Neuropathic pain improved in all patients from VAS 8±2 cm to VAS 2±1 cm ($p<0.05$).

**Conclusion-** Apart from the well-known analgesic effect on neuropathic intractable pain though acting on the spine dorsal horn, the SCS also appears to act on visceral pain and peristaltic motion, probably through influence on visceral nociceptive and sympathetic autonomic system.

**Key words:** spinal cord stimulation; vesical function. Bowel function, peristaltic motion, neuropathic pain.