

pain relief was $62\pm 27\%$ at 12 m. EQ-5D health status improved from 0.19 ± 0.32 to 0.46 ± 0.36 ($p < 0.001$). Oswestry scores also improved from 53 ± 12 , categorized as severe disability, to 38 ± 19 ($p < 0.001$), categorized as moderate disability. 93% of patients would elect SCS again for the same result, and 98% would recommend SCS to a friend with similar pain.

Conclusions: All patients independently recharged the neurostimulator battery. Significant improvements in pain reduction, quality of life, and functional status were observed throughout 12 months post-implant, with a high rate of patient satisfaction with the therapy.

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GOOD AND EXCELLENT RESULTS OF SPINAL CORD STIMULATION (SCS) FOR CHRONIC SEGMENTAL PAIN (CSP) AFTER LOW BACK SPINAL SURGERY (LBSS)

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Background and Aims: "Therapy resistant" CSP after LBSS occurs frequently. This study was undertaken to investigate pain relief by SCS.

Methods: In this open prospective longitudinal study patients with CSP, not responding to other conservative or invasive therapy, were selected. A Pisces-Compact Quadripolar Electrode (Medtronic Inc.) was implanted in the dorsal epidural space for test stimulation during 7 days. In patients with more than 50% pain reduction (Numeric Rating Scale (NRS)) implantation of the Implantable Pulse Generator followed. Pain reduction at follow up (FU) and complications were recorded.

Results: 19 Patients, 7 M, 12 F, age 55 ± 10 yrs (mean \pm s.d.) underwent definite implantation. FU time was 6.4 ± 1.6 yrs (min. 4, max 8.5 yrs). At FU, NRS scored excellent (pain free) or good ($>50\%$ improvement) in 17 (89%) and 2 (11%) patients, respectively. Electrode displacement occurred in 6 (31%) patients after 37 ± 3 months. Only 1 patient had a minor infection. The number of concomitant pain relief therapies dropped significantly ($p < 0.0001$) from 8.9 ± 4.7 to 0.9 ± 1.4 (before/after SCS).

Conclusions: In experienced hands, SCS provides long lasting good to excellent pain relief in CSP after LBSS. Major complications are not to be expected. However, electrode displacement should be subject for further study.

D11 NON-OPIOID ANALGESICS: OTHER

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ALLERGIC REACTIONS WITH ORAL TRAMADOL – 4 CASES

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Tramadol, a synthetic central acting analgesic is a good choice of second step analgesic treatment for moderate to severe malignant and non malignant pain. This mu receptor agonist has side effects such as sedation, itching, sweating and nausea like opioids, but does not induce histamine like morphine. Patients tolerate oral tramadol easily, with the most common side effect of nausea vomiting which is subsided by prescribing an antiemetic medication. Analgesic effect starts after 1 hour of oral intake of drug, peaks in 2–3 hours and lasts 4–6 hours.

We report 4 patients who developed various allergic reactions after oral tramadol drop. One of the patients experienced flushing, itching of all of the face and swelling of tongue and throat after 2 days with a dose of oral 75 mg daily. She had a persistent angioedema in spite of intense parenteral treatment with antihistaminic and steroids. Second patient developed itchy red papular lesions of head, neck and shoulders. Two other patients complained of flushing, itching and swelling of the whole body after oral intake. For last 3 patients cessation of tramadol intake reversed all allergic side effects spontaneously. There was no story of allergic asthma, concomitant administration of SSRI or ACE inhibitors which could enhance allergic side effects.

Tramadol which is a very effective drug has also a potential of life threatening allergic reactions. Initiating the treatment with low doses and informing the patient of allergic side effects for emergency admittance seems the best management strategy.

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ANALGESIC EFFECTS OF PREINCISIONAL ADMINISTRATION OF LOW DOSE KETAMINE AND LORNOXICAM IN LOWER EXTREMITY SURGERY

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Background and Aims: In this prospective, randomized, and double-blinded clinical trial, we evaluated the efficacy of preincisional administration of low dose intravenous ketamine compared with intravenous lornoxicam for postoperative pain relief and total fentanyl consumption after lower-extremity surgery.

Methods: Seventyfive ASA I-II patients scheduled for lower extremity surgery were randomly allocated to one of three groups. Patients in Group C received 4 ml iv-saline, patients in Group L received 8 mg iv-lornoxicam (4 ml), patients in Group K received 0.15 mg/kg iv-ketamine (4 ml), 15 min before skin incision. Standard general anaesthesia was administered to all patients. At the end of surgery, all patients received standard iv-fentanyl with a PCA device (loading dose: 25 mcg, bolus doses: 15 mcg, lockout: 15 min). Analgesia was evaluated by Visual Analog Scale (VAS) at rest and during coughing, at 0 (recovery room), 2, 4, 6, 8, 12, 20, 24 h after surgery. Cumulative and total fentanyl consumption, rescue meperidine requirement, side-effects, and patient satisfaction were recorded.

Results: VAS scores were significantly lower in Group K both at rest and movement ($p < 0.005$). Total fentanyl consumption was significantly lower in Group K (705 ± 26) than in Group C (1127 ± 73) and Group L (1152 ± 64) ($p < 0.001$). Side effects and rescue meperidine requirements were lower in Group K and higher patient satisfaction scores were obtained in Group K.

Conclusions: In conclusion, this study suggests that preoperatively iv administration of 0.15 mg/kg ketamine produces more effective analgesia for postoperative pain relief after lower extremity surgery than iv administration of 8 mg lornoxicam.

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THE COMPARISON OF EFFICACY AND SAFETY OF THICOLCHICOSIDE AND PHENPYRAMIDOL IN ACUTE SPINAL PAINFUL MUSCLE SPASMS – AN OPEN STUDY

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Muscle relaxants are often used in acute muscle spasms with other drugs or alone. Their side effects are often. Thicolchicoside (TCC) and phenpyridole (PP) are non-sedating drugs.

In this study both drugs were compared for efficacy and safety. Twenty-seven patients with painful spasms were randomized to two groups. First group received 8 mg/day TCC and second group received 800 mg/day PP for ten days. Pain (VAS), muscle spasms (Standard function status), Standard side effects in patients were evaluated. Patients ages were between 30–65 years. The evaluation was made both before and after the treatment. Patients in both groups were improved. Important side effects were not seen in two groups. The drugs were well tolerated.

In conclusion both drugs were effective and safe. They can be used alone without other drugs (as non-steroid drugs).