



<b>Title</b>	<b>Accelerated Systematic Review of Implantable Spinal Infusion Devices for Chronic Pain and Spasticity</b>
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## Aim

To assess the safety and efficacy of implantable spinal infusion devices for treating chronic pain and spasticity.

was also searched in February 2003. Searches were conducted without language restrictions.

## Conclusions and results

The use of implantable spinal infusion devices appears to be safe. Drug-related adverse events occur, as they do when chronically administered via the systemic route, although perhaps less than for systemic administration. Device-related adverse events occur with replacement or revision rates ranging from 3% to 17% and the explantation rate varying from 0% to 21% in the reviewed literature. Infusion of drugs via implantable spinal infusion devices appears efficacious, with significant reductions in pain measured via visual analogue scales for pain. Improvements in care and activities of daily living were reported for patients with spasticity. The included randomized controlled trial also showed a reduction in toxicity, when compared to medical management, and this reduction impacted on the cumulative survival of the group implanted with the spinal infusion device. Cost studies showed that implantable spinal infusion devices are less costly in the long term than medical management. Short-term costs of implantable infusion devices are high, due to the cost of screening, the device itself, and implantation of the device. Implantable infusion devices were not cost effective when circumstances of high adverse events and high cost of care were simulated. Hence, it is important to carefully select a patient group that is suitable for implantation and likely to retain the implant. Infusion of opioid agents for treating chronic pain or baclofen for treating spasticity, intrathecally via implantable infusion devices appears to be safe and effective, although this conclusion is based on limited evidence.

## Methods

MEDLINE, PREMEDLINE, EMBASE, Current Contents and PubMed were searched, using Boolean search terms, from inception to April 2003. The Internet