



Title	Postoperative Pain Treatment at Home with an Elastomeric Pump
Agency	DACEHTA, Danish Centre for Health Technology Assessment National Board of Health, 67 Islands Brygge, DK-2300 Copenhagen S, Denmark; Tel: +45 72 22 74 00, Fax: +45 72 22 74 07; www.dacehta.dk
Reference	2008; 8(2). ISBN 978-87-7676-688-7. www.sst.dk/Udgivelses/2008/Postoperative%2Opain%2Otreatment%2Oat%2Ohome%2Owith%2Oa%2Oelastomeric%2Opump%2O-%2Oa%2OHealth%2OTechnology%2OAssessment%2OSummery.aspx

Aim

To determine whether it is appropriate to introduce a new analgesic method after foot surgery.

Conclusions and results

In patients with moderate to severe postoperative pain lasting 3 to 4 days, conventional oral painkillers do not provide sufficient analgesia. The standard postoperative pain treatment regime for these patients has been a blockade of the sciatic nerve in the popliteal fossa as a single-shot injection (block method). The problem with this regime is that the duration of analgesia is too short. Hence, a new method was introduced (block+pump), where the effect of the blockade is prolonged through continuous infusion of a local anesthetic by using a perineural catheter and elastomeric pump.

The scientific literature and our own studies provide a basis for concluding that the block+pump method is more effective than block alone. A high success rate (95%-98%) is reported when experienced practitioners perform the procedure. It will be possible to further improve effectiveness by applying new methods.

Recommendations

Based on the present economic analysis, no definitive recommendations can be made on whether a block, or block+pump should be used. It has been shown that block+pump treatment minimizes the loss in quality of life, but it is also more expensive than treating pain by the block method alone.

Methods

This report is based on a literature study and the results of our own studies. Due to the lack of randomized controlled trials and organizational studies, the project group decided to supplement the literature study with results from concurrent clinical studies at the anesthesia clinic, Frederiksberg Hospital.