Intrathecal Analgesia for Cancer Pain: Externalised Intrathecal Catheters

Dear Editor,

We thank the authors for a comprehensive review¹ on the role of interventional pain therapies used in cancer pain as well as a informative local audit using the intrathecal catheter (PORT-A-CATH® IT) implantable system (Deltec Inc, USA).²

Our comments are directed at the neuraxial delivery of drugs in both articles. We agree that the most widely accepted indications for intrathecal analgesia in cancer pain are uncontrollable side effects of the systemic pain therapy and inadequate pain relief with parenteral opioids despite dose escalation.³ The authors in the review suggest that epidural analgesia can be used as a trial to assess the effectiveness of pain relief before placement of a permanent implanted intrathecal drug delivery (ITDD) system. On the contrary, we advocate initiating intrathecal analgesia straightaway as intrathecal drug delivery has been shown to produce higher rates of satisfactory pain relief.⁴ From the practical point of view, this avoids the additional titration step, the more frequent changes of drug reservoirs with epidural infusion and the concomitant risk of epidural fibrosis in the long term. Epidural analgesia infusion is only indicated in

The results of a recent systematic review on intrathecal drug infusion by an external catheter system by Aprili et al⁵ reports a deep infection rate of 1.4% in 560 cases and superficial infection rate of 2.3% in 412 cases, dispelling myths that external catheter systems risk causes more infections.

In a study performed at our centre more than 15 years ago, 51 cancer pain patients received intrathecal infusion for a total duration of 3140 catheter-days (8.6 years).6 Today, many of our patients are managed with the externalised intrathecal catheter system for months without complications. Regardless of the localisation of the pain complaints, all catheters are inserted between the second and the fifth lumbar vertebra. The catheter is tunnelled stepwise (Fig. 1) subcutaneously to the anterior abdominal wall or to the shoulder area to enable some patients to shower. Tunnelling takes place over a distance of 30 to 40 cm using a standard epidural needle (Fig. 2). The catheter is then exteriorised and fixed with a transparent self-adhesive dressing. No sutures to fix the catheter or prophylactic antibiotics are used. A standard closed system is obtained by connecting the catheter, the antibacterial filter and the

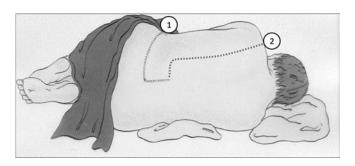


Fig. 1. Catheters may be tunnelled laterally to the anterior abdominal wall or superiorly to the shoulder.

situations of very short life expectancy (less than 2 weeks).

As an equally safe and effective alternative to the local practice of using the PORT-A-CATH system for intrathecal drug delivery,² we describe our practice of intrathecal infusion using an externalised intrathecal catheter system.



Fig. 2. Tunnelling to the anterior abdominal wall. Stepwise technique requires making 2 to 3 superficial stabs in the skin over a distance of about 30 to 40 cm.

extension tubing to the drug reservoir. Change of the drug reservoir is required usually every 1 to 2 weeks depending on infusion rates. The rest of the system together with the self-adhesive dressing are changed as a whole every 4 to 6 weeks by a specialised pain nurse in an aseptic manner, minimising the risk of contamination of the system.

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Reply from Author: Intrathecal Analgesia for Cancer Pain: Externalised Intrathecal Catheters

Dear Editor,

We thank Dr Nicholas Chua et al for their interest in our review article. We agree and appreciate the experience and comments by the authors regarding the usage of externalised intrathecal catheter for analgesia in cancer pain.

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