

Spinal analgesia: where is the evidence?

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Dear Editor,

We read with interest the systematic review by Myers and colleagues [1]. The authors conducted a thorough review of the literature on intraspinal techniques for pain management in cancer patients. They did a good job summarizing the existing studies and consensus. However, we would like to express our concerns regarding the authors' conclusions. Specifically, they stated in the abstract that “the evidence supported the use of intraspinal techniques for cancer pain management... Intraspinal techniques monitored by an interprofessional health care team should be included as part of a comprehensive cancer pain management program”.

It is unclear how the authors arrived at these conclusions. The authors identified three randomized controlled trials comparing intraspinal with systemic analgesia [2–4]. The first study by Vanino et al. found no statistically significant difference in pain [2]; the second study by Smith et al. revealed a borderline statistical significance of questionable clinical value [3], while the third council study revealed no difference in pain control between epidural and subcutaneous administration of morphine [4]. The methodologic quality of the three included studies needs to be highlighted. Two studies reported no sample size calculations, and both appeared to be under-powered [2, 4]. Two were open-label studies [2, 3] which could significantly affect how pain and side effects were assessed. Finally, all were supported by pharmaceutical companies. It is known that industry support is an important source of bias in clinical trials [5, 6].

The authors also wrote in their discussion that “the main advantages of intraspinal analgesia for cancer pain are the

delivery of adequate pain control and fewer side effects than with the conventional analgesia routes. Disadvantages of intraspinal analgesia include the technically demanding insertion procedure and close patient follow-up required by skilled healthcare personnel”. The authors may also want to emphasize the procedural risk and complications related the catheter and/or pump, such as infections, bleeding, and cerebrospinal fluid leak. The limited reporting of this important information could be potentially misleading.

Based on these findings, perhaps the most appropriate conclusion is that the role of intraspinal opioids for the management of cancer pain has not been established and that adequately powered, well-designed, independently funded clinical trials are required before this complex, risky, and expensive intervention becomes part of routine care.

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