

Effectively Starting and Titrating Intrathecal Analgesic Therapy in Patients With Refractory Cancer Pain

Patrick J. Coyne, MSN, APRN, FAAN, Tom Smith, MD, Jill Laird, MN, RCNS, CHPN, Lea Ann Hansen, PharmD, BCOP, and David Drake, MD

Approximately 14% of patients with cancer will experience refractory pain (Meuser et al., 2001). Refractory pain can be defined as pain that responds poorly to conventional treatment. In addition, the side effects of opioids and coanalgesics often produce more distressing symptoms than the pain itself. These symptoms and side effects may be numerous and may include nausea, vomiting, sedation, constipation, confusion, and pruritus, among others. The need for expanding analgesic treatment plans must extend beyond the stepwise approach to pain using oral analgesics described in the World Health Organization (WHO) ladder (Coyne, 2003). The ladder, which attempts to guide clinicians to appropriate strengths and types of medications based on pain severity, originally was intended as an analgesic guideline for developing countries; however, it is successful in helping 80%–90% of patients with cancer-related pain achieve relief (Meuser et al.; Zech, Grond, Lynch, Hertel, & Lehmann, 1995). This poses the question, “But what of the other 10%–20% of patients?”

Intrathecal Analgesic Delivery System

An intrathecal analgesic delivery system is one approach that is a step above the WHO

Patients continue to suffer from pain despite their analgesic regimen and frequently from symptoms related to these interventions. This article describes the role that intrathecal analgesia may play in improving comfort for individuals experiencing refractory pain and/or symptoms of opioid therapy. Patient selection, staff education, institution requirements, medications, and titration guidelines also will be reviewed. Patients with cancer clearly deserve to achieve comfort; therefore, intrathecal therapy, which is a safe intervention, must be considered when refractory pain or symptoms occur.

ladder (see Figure 1). In their cancer pain guidelines, the American Cancer Society and National Comprehensive Cancer Network (2000) noted the need for this therapy to be considered. In a randomized clinical trial of more than 200 patients with cancer that examined comprehensive medical pain management versus intrathecal drug delivery systems, drug toxicity decreased and pain relief improved when using intrathecal drug delivery systems (Smith et al., 2002). The ideal candidates for intrathecal analgesia are those continuing to experience refractory pain or those experiencing symptoms from analgesic agents themselves (see Figures 2 and 3).

Institutional Requirements

The use of intrathecal therapy has been accepted as an integral system for manag-

ing pain. This intervention must be considered and offered in the case of refractory pain or for symptoms from analgesic agents (Smith, Coyne, & Staats, 2004). Typically, intrathecal therapy can be managed easily in the outpatient setting (Smith & Coyne, 2003). Nurses must be trained and supported adequately to provide seamless patient care with minimal risk of complications. A multidisciplinary approach is required to ensure appropriate analgesia. Knowledgeable physicians, nurses, pharmacists, and physical and occupational therapists, as well as appropriate psychosocial support, are important to properly manage pain in this population (Panke & Coyne, 2004). Physicians and advanced practice nurses need to safely assess and prescribe medications based on the type of pain, response to other agents, and potential side effects. Physical and occupational therapists are needed to evaluate functional status and guide patients and families with techniques for maintaining

Submitted January 2005. Accepted for publication April 6, 2005. At the time this article was written, the primary author was a consultant for Medtronic Neurological, which manufactures an intrathecal drug delivery system.

Digital Object Identifier: 10.1188/05.CJON.581-583