Intrathecal Treatment in Cancer Patients Unresponsive to Multiple Trials of Systemic Opioids


Abstract:

The aim of this study was to evaluate the clinical response to a combination of intrathecal morphine and levobupivacaine in advanced cancer patients who were highly opioid-tolerant, being previously treated with multiple opioid trials unsuccessfully. Initial intrathecal morphine dose was calculated from the previous opioid consumption using a morphine oral-intrathecal ratio of 100:1. Then, doses of both drugs were modified during the treatment according to the clinical needs and balanced with adverse effects. Fifty-five patients were assessed during admission, before starting the intrathecal treatment, during the titration phase, and followed up to death, by frequent phone contacts or visits, as available. Pain and symptom intensities were recorded before starting the intrathecal treatment (T0), at time of hospital discharge (T discharge), and then at 1 month (T1), 3 months (T3), 6 months (T6) intervals, and the last observation, at least 1 week before death (T death). Fifty-five patients were selected for starting an intrathecal treatment. Thirty-two patients were males. The mean age was 60 years (95% CI 57-63), and 65.4% of patients were under 65 years. The most frequent indication was the presence of adverse effects and poor pain control. Complete data with adequate follow-up until death were available in 45 patients. Statistical differences in pain intensity were found at the different time intervals examined until death. Statistical decreases in the intensity of drowsiness and confusion were found until 1 month after starting intrathecal therapy. Statistical differences were found in daily intrathecal morphine doses, with a 3-fold increase at time of hospital discharge. Subsequently, further increases in doses were not significant. Conversely, systemic opioids, expressed as oral morphine equivalents, significantly decreased at all the intervals examined until death. Early complications included mild bleeding in 2 patients, without consequences, headache in 4 patients, bladder catheterization in 6 patients, reoperation for bleeding or changes of catheter position in 4 patients, unrelated death in 1 patient, and stroke in another 1. Late complications included local infection in 2 patients, and discontinuation of intrathecal therapy due to spinal compression. In patients who had received multiple trial of opioids and routes of administration, the intrathecal treatment started with an oral-intrathecal morphine conversion ratio of 100:1, and local anesthetics at the most convenient clinical doses provided a long-term improvement of analgesia, with a decrease in adverse effects and opioid consumption until death.

Comments:

Strengths/uniqueness:

This is an interesting report that describes the experience of a palliative care group using intrathecal treatment for refractory cancer pain syndromes. The cohort of 55 patients is relatively large & the improved outcomes in symptom control are noteworthy.
Weakness:

The volume of the patient group from which this cohort was selected or the characteristics of the underlying features that contributed to these refractory pain syndromes is not reported. The methodology of the pain assessment is inadequate & vague e.g. the time frame of the pain intensity question is not described and we do not know how many patients achieved a definition of stable pain control. There is no information provided on how to ensure adequate follow up & response to complications of patients discharged into the community and how this was done by the authors of this study.

Relevance to Palliative Care:

All palliative care programs have the challenge of how to deal with refractory pain & how often to incorporate more invasive modalities safely into the core service provision.