Successful use of ketamine for intractable cancer pain.

Lossignol DA, Obiols-Portis M, Body JJ. Support Care Cancer 2005; 13:188-93

Prepared by: Prabhu Sonpar

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Abstract

Background: Despite medical awareness, intractable pain is a serious problem in cancer and occurs in up to 2% of advanced cancer patients. However, few data are available concerning the optimal treatment of such patients. The emergence of intractable pain may notably be due to the activation of N-methyl-D-aspartate (NMDA) receptors located in the central nervous system. NMDA antagonists might thus be an interesting approach in such pain syndromes. Patients and methods: Twelve patients with intractable cancer pain received a test dose of 5-10 mg of ketamine, a strong NMDA antagonist, in order to determine their response and tolerance to the drug. Continuous intravenous infusions of ketamine associated with morphine were then administered. Main results: The acute test dose was successful in all cases (VAS<3/10 after 5 min). The prolonged use of ketamine allowed us to reduce the total daily dose of morphine required (range: 200-1,200 mg) by 50% and allowed eight patients to go home with a portable pump with morphine and ketamine during a relatively long period of time (range: 7-350 days, median: 58 days). Side effects were moderate (dizziness) and they were limited to the test phase. Conclusion: Our data suggest the importance of NMDA receptors in the genesis of chronic cancer pain and indicate that NMDA antagonists should be further studied for the management of cancer pain and, in particular, intractable pain.

Comments

Strengths/uniqueness: Study done for intractable pain on different tumor types and pains. The aim was pain relief. 100% patients followed until patients died.

Weaknesses: Small study of 12 patients. Followed for 7-64 days in majority (only 3 patients followed for more than 100 days). Claim 50% reduction in morphine not reflected in Table 3. Long term side effects not well documented. Ketamine was mixed with morphine and no comparisons made, no placebo. Lack of acknowledgement of methadone as medication for intractable pain.

Relevance to Palliative Care: Intractable pain remains a challenge in palliative care. A larger, longer trial comparing various pain management medications would be helpful.