

## ***Journal Watch***

### **Self-administered nitrous oxide for the management of incident pain in terminally ill patients: a blinded case series.**

Parlow JL, Milne B, Tod DA, Stewart GI, Griffiths JM, Dudgeon DJ. Palliat Med 2005; 19:3-8.

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Received during: Journal Rounds on the Tertiary Palliative Care Unit, January 9, 2007

#### **Abstract**

The treatment of incident pain in terminally ill cancer patients receiving long-term opioid therapy remains a challenge. Self-administered inhaled nitrous oxide has been used for short-term analgesia in this setting, with mixed results. It is unclear whether nitrous oxide exhibits cross-tolerance with opioids, and there is the possibility of a strong placebo effect in previous unblinded reports. We report on a double-blind crossover case series, in which seven patients received either nitrous oxide/oxygen or a placebo air/oxygen mixture on each day of a two-day trial. Outcome indices were obtained before, during and after each use of the gas for anticipated incident pain. The patient population was very heterogeneous with respect to disease, pain scores and concurrent treatments. Nitrous oxide was beneficial during incidents in five of seven patients; the remaining two patients reported an overall preference for the nitrous oxide day. We conclude that a trial of self-administered inhaled nitrous oxide should be considered in patients with difficult incident pain.

#### **Comments**

##### Strengths/uniqueness:

- Addressed a common and important clinical question
- Very good methods/technique
- Similar patient population

##### Weaknesses:

- Low number of patients
- Nitrous for short term use only

##### Relevance to Palliative Care:

- Not enough information to change practice options
- Perhaps more research in future