Letter to the Editor

Nitrous oxide as an opioid and the association between the therapeutic use of narcotics and addiction.

Sir,

I read with interest the excellent practical article by Twycross (1984) on analgesia. However, there are two points I would like to raise regarding opiate and opioid substances.

First, Twycross does not mention an excellent and often overlooked analgesic, namely nitrous oxide (N_2O). This agent has been shown to be a most useful pain relieving agent (Thal *et al.*, 1979). Furthermore, N_2O at analgesic concentrations should be regarded as an opiate receptor agonist, and should be so classified. This follows from both *in vivo* work in animals (Berkowitz *et al.*, 1976, 1977) and man (Gillman *et al.*, 1980; Gillman & Lichtigfeld, 1981; Yang *et al.*, 1980). In addition, *in vitro* binding studies have shown a direct action of N_2O at the mu opioid receptor (Ahmed & Byrne, 1980; Daras *et al.*, 1983).

Second, many practitioners even today are niggardly in their use of opioid analgesics for fear of producing addiction. However, such fears are largely groundless since the therapeutic use of narcotic analgesics is rarely associated with abuse. (Porter & Jick, 1980).

M.A. Gillman,
South African Brain Research Institute,
Orange Grove, 2192 Johannesburg,
South Africa

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