

HYDROMORPHONE FOR ACUTE AND CHRONIC PAIN

C Quigley

Cancer Centre, Hammersmith Hospital, London, UK

While morphine is the gold standard for the management of severe cancer pain, some patients either do not achieve adequate analgesia, or suffer intolerable side-effects. For these patients alternatives such as hydromorphone are recommended. This review explores the evidence for the efficacy of hydromorphone in the management of pain.

A systematic search, from 1966 to 2000, of published and unpublished randomised trials which involved the administration of hydromorphone, for both acute and chronic pain conditions, in adults and children, was conducted.

Forty three studies (2725 subjects) were included in the review. Approximately half of these studies received a low quality score. In addition, the heterogeneity of the studies precluded combination of data and results. A meta-analysis was therefore not possible. Of the 43 included studies, 11 (645 subjects) involved chronic pain conditions (all cancer) and 32 (2080 subjects) acute pain. Three studies were placebo-controlled. Of the remainder, hydromorphone was compared with other opioids, bupivacaine and with itself, using different formulations. The routes of administration included intravenous, oral, spinal, intramuscular and subcutaneous.

Overall, hydromorphone appears to be a potent analgesic. The limited number of studies available suggests that there is little difference between hydromorphone and other opioids in terms of analgesic efficacy, adverse effect profile and patient preference. However, as most studies involved small numbers of patients, it is difficult to determine real differences between both drugs. In the context of both acute and chronic pain, the issue of equi-analgesic ratios between morphine and hydromorphone was not resolved.