

Methadone: An Orphan Drug?

Dear Editor:

A pharmaceutical product is called "orphan drug" when, although promising or clearly valid from a scientific and therapeutic point of view, it is not profit-bearing and, therefore, not interesting for the pharmaceutical industry. The consequences are the lack of extensive research on its effects, and mainly, the lack of appropriate information to physicians, nurses, and administrators involved in hospice and palliative care settings. This is the case of oral methadone, a synthetic opioid agonist used as a maintenance drug for opioid addicts.

In the last 10 years, several studies (not financially supported by the pharmaceutical industry) have demonstrated the unique and favorable pharmacologic and analgesic properties of methadone in treating cancer-related pain.¹ Its high oral and rectal bioavailability, low cost, low tolerance development as well as the lack of active metabolites or accumulation in patients with renal failure have been underlined.^{1,2} Recommendations for the use of methadone, its efficacy, and tolerability in patients with poor response to other mu opioid receptor agonists, as well as up-to-date equianalgesic dose ratios have been published.¹⁻³ Physicians' knowledge, availability, and overall clinical use of methadone are extremely limited worldwide.

At a time when legislative and regulatory barriers to opioid access are starting to fall around the world,⁴ drug cost is one of the main reasons why most patients with cancer around the world die without having ever received a single dose of a strong opioid analgesic. It has been calculated that the cost for 30 days of 180 mg/d of slow-release morphine ranges from \$116 to \$173, the cost for an equianalgesic dose of slow release oxycodone is about \$350, for an equianalgesic dose of transdermal fentanyl is \$331 whereas the cost for an equianalgesic dose of oral methadone is about \$11.⁵

Although methadone would constitute a

cost saving for patients with cancer and their families dealing with the financial burden of terminal care (with particular reference to those requiring high-dose opioids and/or living in developing countries) and also for national health services, the access to methadone is extremely low. If a different cultural approach does not occur, and the lack of institutional information (totally independent of the pharmaceutical industry) persists, the low cost of methadone will not simply represent a double-edged blade, but it will be the main reason for its nonuse in favor of other high cost opioids, thus creating much financial difficulty for patients with low income and with no drug insurance coverage.

Because the United States is the world leader in orphan drug legislation and action, whereas Europe seems to remain far behind, can we hope to receive a sign from the United States for the need of political support for a larger use of methadone in the treatment of cancer pain worldwide?

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