

Journal Watch

Survey on the use of buprenorphine patches in the palliative care practice.

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Abstract: Transdermal buprenorphine is a new formulation of the old drug available for the treatment of cancer and non-cancer pain. The drug offers number of interesting new features and was found effective in clinical trials in cancer patients with pain. We performed a survey of the use of buprenorphine patches for one year. In the survey we included 58 admitted patients (67 admission periods), whose clinical records and drug charts were subjected to analysis. Opioid naive patients were started either on 5 or 10 µg/hour. Mean buprenorphine dose was 22.3 µg/hour (95% CI: 16–28.6), increased on day 8 to 25.4 µg/hour (95% CI: 18.6–32) and ended up at the dose of 31.3 µg/hour (95% CI: 20.9–41.6) on the last day of treatment; day 19 (95% CI: 14.5–23.5). The overall dose increase was approximately 2% per day. Approximately half of the patients needed beside buprenorphine other opioids either in a slow release or immediate release form, usually morphine or oxycodone. Swapping from morphine, oxycodone and fentanyl to buprenorphine was without problems in all of the cases. The doses of all opioids administered calculated as oral morphine equivalents showed insignificant decreases for morphine and oxycodone to buprenorphine swaps. In case of fentanyl the oral morphine equivalents of opioids were significantly lower after swap ($p = 0.0039$). No signs of antagonism between the drugs were observed.

Conclusion: Buprenorphine patches had been well tolerated by most patients and appear to be useful in the treatment of cancer pain, either as monotherapy or in combination with other opioids. In many patients the its dose needed to control pain was lower than of original opioids or opioid combinations resulting in patients being more alert and active just after 1-2 days of treatment. Swap from fentanyl to buprenorphine offers perspective of achievement of pain control with much less toxicity and should be investigated in more detail.

Strengths:

Analysis done on the opioid naive patients and also on those patients who were already on stronger opioids.

Starting doses were different in both patient groups (compared to the previous studies),

Doses increased at same interval of 8 days in all patients at the same rate.

In this study, buprenorphine was compared with other opioids, rather than placebo to determine its comparative efficacy.

Treatment was discontinued only in 3% cases due to adverse effects.

Main goal of the survey was to establish safe initial doses of buprenorphine patches in old and frail terminally ill patients.

Weaknesses:

Retrospective analysis. Non-randomized controlled study,

no blinding ,

Patients were assessed and then switched to buprenorphine when pain is inadequately controlled or due to adverse effects.

Small number of patients selected with unequal distribution.

Study population was not very clearly described - i.e. types of cancer and pain syndromes.

The survey did not analyse directly the pain intensity reported by the patients, but use only PRN opioids as a surrogate for this.

Implications in Palliative Care: Transdermal buprenorphine offers certainly some new and attractive features for treatment of pain in palliative care patients. It has been underused in Canada but has been in use in Europe since 2001 with good effect. Although it was never proven in clinical trials that pure mu opioid receptor agonists are better than partial agonist. Approximately half of patients treated with it need other opioids, usually morphine or oxycodone, but their doses should be titrated starting from very low doses. Its use is limited to very stable pain of moderate intensity. Other benefits includes its use in renal impairment as it is not excreted through kidneys, and less constipating compared to full opioid agonists. However, skin toxicity with buprenorphine patches can be serious and may need discontinuation.