

Tramadol versus Buprenorphine

Background:

Research shows Tramadol to be as effective as other drugs with similar modes of action, but patients report fewer side-effects such as constipation and the risk of respiratory depression is lower. Because euphoria and dysphoria are rare, there is also little risk of abuse or dependence. This research therefore compared Tramadol, defined as having only weak potency, with Buprenorphine, an opioid with a potency equivalent to half that of morphine, but with a greater risk of adverse side-effects.

Study Objective:

The purpose of this study was to compare the pain relief effect and the extent to which patients could tolerate the [use of Tramadol](#) and Buprenorphine.

Design:

A controlled crossover trial with randomized sequences.

Patients:

60 patients (44 men, 16 women; average age 61.4 years), all presenting with advanced tumours and suffering oncological pain.

Interventions:

The patients took both drugs orally in a weekly cycle with a 24-hour fallow period between drug regimes. An oral daily dose of 300mg was prescribed for [Tramadol](#), with a sublingual daily dose of 0.6mg for Buprenorphine. The researchers assessed the patients using the Karnofsky Performance Status Index and estimated the severity of pain before and during a four-hour period after taking the two drugs. Each patient also kept a daily diary recording the severity of pain beginning one hour after the dose, the pattern of pain during each day, comparing its severity with that experienced on the previous day. They also assessed the duration and quality of sleep. The scores using the Karnofsky Index showed little variation using either drug, but all the other measures demonstrated real improvement in the patients' physical and emotion wellbeing using both drugs.

Results:

Buprenorphine and Tramadol had a comparable pain management effect, with both enabling significant pain mitigation in the first hour following administration. This mitigating effect was more noticeable on day 2 with Tramadol compared with Buprenorphine. At the end of Tramadol treatment, the quality of sleep had improved through the night. The effectiveness of Tramadol was rated significantly higher. It was also better tolerated by the patients.

In general, patients recorded a less troubled reaction to Tramadol than Buprenorphine with the former causing fewer and more mild adverse reactions. Only one patient discontinued [Tramadol hydrochloride](#) as against 18 who were using the reference therapy. Thus, although Tramadol is theoretically less potent, it nevertheless produced equivalent pain relief to the other opioid.

Conclusion:

Among the opioids, Tramadol represents an excellent balance between effectiveness and patient toleration. This study confirms the findings of the preliminary studies.

About the Author

The article is posted and written by James Scott, the researcher and writer.

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