Randomised crossover trial of transdermal fentanyl and sustained release oral morphine for treating chronic non-cancer pain

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Abstract:

Objectives: to compare patients' preference for transdermal fentanyl or sustained release oral morphine, their level of pain control, and their quality of life after treatment.
Design: Randomised, multicentre, international, open label, crossover trial Setting: 35 centres in Belgium, Canada, Denmark, Finland, the United Kingdom, the Netherlands, and South Africa.
Participants: 256 patients (aged 26-82 years) with chronic non-cancer pain who had been treated with opioids.
Main outcome measures: Patients' preference for transdermal fentanyl or sustained release oral morphine, pain control, quality of life, and safety assessments.
Results: Of 212 patients, 138 (65%) preferred transdermal fentanyl, whereas 59 (28%) preferred sustained release oral morphine and 15 (7%) expressed no preference. Better pain relief was the main reason for preference for fentanyl given by 35% of patients. More patients considered pain control as being "good" or "very good" with fentanyl than with morphine (35% v 23%, P=0.002). These results were reflected in both patients' and investigators' opinions on the global efficacy of transdermal fentanyl. Patients receiving fentanyl had on average higher quality of life scores than those receiving morphine. The incidence of adverse events was similar in both treatment groups; however, more patients experienced constipation with morphine than with fentanyl (48% v 29%, P=0.001). Overall, 41% of patients experienced mild or moderate cutaneous problems associated with wearing the transdermal fentanyl patch, and more patients withdrew because of adverse events during treatment with fentanyl than with morphine (10% v 5%). However, within the subgroup of patients naïve to both fentanyl and morphine, similar numbers of patients withdrew owing to adverse effects (11% v 10%), respectively).
Conclusion: Transdermal fentanyl was preferred to sustained release oral morphine by patients with chronic non-cancer pain previously treated with opioids. The main reason for preference was better pain relief, achieved with less constipation and an enhanced quality of life.

Comments:

Strengths/uniqueness: This is a randomized, crossover study that also incorporated a measure of quality of life.

Weakness: Unfortunately, owing to some pragmatic reasons, this study did not incorporate blinding and a double-dummy feature. It is, therefore, possible that the placebo effect associated with applying the patch could have contributed substantially to the greater preference for this

treatment. One wonders whether the preference would be as great for fentanyl if both opioids had achieved the same level of pain control. The patients were not asked directly why they preferred fentanyl over morphine, but the authors inferred that their preference was due to a better quality of life, as reflected in the quality of life assessment scores.

Relevance to Palliative Care: It must be emphasized that the patients in this study had chronic non-malignant pain. Despite this, the finding of less constipation in the fentanyl treated group is in keeping with findings from studies in cancer pain patients. It is clearly difficult to extrapolate findings from a non-cancer pain population to that of an end-of-life/palliative care population.