Is Driving Ability Impaired with Use of Transdermal Fentanyl?

Opioids, such as transdermal fentanyl, have been shown to be effective in the treatment of pain for a variety of chronic conditions. However, the extent of cognitive function impairment caused by long-term use of this therapy is a matter of scientific study. Recent studies are going beyond inquiries regarding simple pain reduction to include issues of pain-related impairment and quality of life.

This study explored an area of cognitive function that significantly impacts quality of life: motor vehicle driving. The study objective was to determine the impact of transdermal fentanyl therapy on complex psychomotor and cognitive performance related to driving ability. Patients receiving transdermal fentanyl for chronic noncancer pain (n = 30) were compared with a group of untreated, healthy controls (n = 90) in a test battery covering the relevant aspects of traffic safety in Germany.

The investigators reported that scores for 3 tests out of 5 tests were slightly worse in the group receiving fentanyl compared with the matched controls. However, when patients who were using unreported drugs, such as benzodiazepines, were excluded from the analysis, the performance of drug-treated subjects was similar to that of the control group.

However, driving-ability tests have some inherent limitations. Individual driving styles differ dramatically, making comparisons among subjects difficult. Additionally, differences in opioid dosage, test systems, patient groups, and duration of drug treatment may also affect results. An innovative approach to this issue has been undertaken by researchers from the Jefferson Pain Center in Philadelphia, Pennsylvania. This approach was presented as a poster at the 22nd Annual Scientific Meeting of the American Pain Society. That study (published in the March 2003 Journal of Pain) uses subjects as their own controls and compares their driving behaviors with and without transdermal fentanyl therapy. Study results were more favorable than those reported by Sabatowski et al.


Topical Nonsteroidal Anti-inflammatory Drugs in Mastalgia

Breast pain, or mastalgia, is a pervasive problem among women who, at their first appointment with a primary care physician, have symptoms ranging from merely distracting to acutely disruptive. The condition is typically treated with therapeutic agents such as bromocriptine, tamoxifen, or gonadotropin-releasing hormone analogues, which produce adverse effects and require close monitoring and dose adjustment. Therefore, topical analgesics may provide a desirable option as they have few systemic adverse effects. For mastalgia, topical nonsteroidal anti-inflammatory drugs (NSAIDs) have not been widely studied or used.
This double-blinded study was conducted in Turkey with 108 patients who had cyclic or noncyclic mastalgia. Patients were randomly assigned to receive either diclofenac as a topical NSAID or placebo. After 6 months, both the cyclic and noncyclic mastalgia treatment groups showed a significantly higher change from baseline in pain levels compared with patients taking placebo (P = .0001). NSAID therapy controlled the pain totally in 47.7% of the group with cyclic mastalgia and in 50% of the group with noncyclic mastalgia; other subjects reported significant pain reduction. No side effects were reported. This study suggests that topical NSAIDs may provide a relatively safe and effective approach for the management of this common condition.


**TREATING MUSCULOSKELETAL PAIN**

This article reviews the evidence for therapeutic efficacy of various drugs widely used for treating regional musculoskeletal pain, including topical nonsteroidal anti-inflammatory drugs (NSAIDs). The author highlights challenges in the design of clinical trials used to assess pain management. Foremost among those challenges are the heterogeneity and general lack of diagnostic and classification criteria for musculoskeletal pain, which may be associated with a number of conditions and diseases— inflammatory and noninflammatory, acute and chronic. The result is a certain degree of vagueness and inconsistency in clinical outcome measures, with few guidelines available to guide study designers. Typical study endpoints include pain reduction, reduction of inflammation, restoration of function and, in some instances, time to resolution of pain and other symptoms. Thus, available evidence surrounding management of musculoskeletal pain is somewhat limited by imperfect study design.

This article offers an overview of numerous reviews on management of musculoskeletal pain. Findings from 2 Cochrane reviews of topical NSAIDs for treatment of lateral elbow pain and Achilles tendinitis are succinctly summarized, as are reviews of systemic agents used in musculoskeletal pain. This comprehensive article offers a valuable gateway to quick insights regarding available agents and the medical evidence surrounding their use. It highlights the fact that randomized controlled clinical trials assessing management of many regional musculoskeletal pain conditions are not only methodologically limited, but also few and far between.