

Characterization of Cognitive and Subjective Side Effects from Immediate Release Oxycodone in Older Adults.

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Persistent pain, sufficient to cause significant impairment in daily functioning, affects up to 50 percent of older adults. Analgesics are the most common therapy used to manage pain, with opioids playing an increasingly important role in the treatment of chronic disabling pain in older adults. The efficacy of opioid therapy needs to be balanced against potential side effects, including the risk of neurocognitive impairment. This study measured the objective and subjective neurocognitive effects of two doses of immediate-release oxycodone in healthy, older (>65 years) adults. Participants were assessed for subjective physical side effects and completed a one hour cognitive testing battery prior to medication and 60 minutes after dose. Ten participants completed two separate study days and were blind to dose order (5, 10 mg immediate release oxycodone). Blood samples were taken to characterize medication pharmacokinetics. There were no significant differences on cognitive measures between baseline and 60 minutes for the 5mg dose. However, decrements in simple and choice reaction time as well as verbal memory were evident (p values ranged from p<.01 to p<.08) for the 10mg dose. Participants reported subjective side effects including compromised alertness (e.g., spaced out, confused) subjectively rated as mild to moderate after dose at 5mg and 10 mg. No somatic effects (e.g., itching, nausea) were reported after 5 mg dose. After 10 mg dose, two participants reported dry mouth and one reported itchiness. Medication blood levels demonstrated a peak level 60-90 minutes post dose with a return to baseline at five hours. This study suggests that mild changes in reaction time are evident at peak blood levels for older adults. Further, studies will examine how long these neurocognitive changes persist. Support from NCI# 10372-03