Fentanyl patch probably not related to amnesia in case

Taylor and colleagues detail a case that they claim is an opioid-related amnestic syndrome related to fentanyl patch use in a 63-year-old patient with multiple sclerosis and chronic musculoskeletal pain.[1] There are several reasons why the amnesia described in this case is probably not related to fentanyl patch use.

When transdermal fentanyl is started, the time from application to minimal effective concentration is 1.2 to 40 hours, and the time from application to maximum serum concentration is 12 to 48 hours.[2] When initiating the fentanyl patch, the current opioid is continued for 12 hours to provide sufficient analgesia and to prevent withdrawal symptoms.[3] The patient described in this case was found "unresponsive" 12 hours after the patches were initiated.[1]

There is insufficient clinical detail to determine whether this patient was unresponsive secondary to respiratory depression from fentanyl. The fact that she awoke with a naloxone infusion does not confirm that the unresponsiveness was due to the fentanyl, as the naloxone would have reversed the hydromorphone she was currently taking. Those who take opioids for moderate to severe pain, and have it reversed by naloxone, will tell you that sudden return of the pain is greatly stimulating.

The other cases referred to by Taylor and colleagues were acute overdoses secondary to illicit fentanyl, which could contain toxins. In the report of 13 cases, all patients had a history of substance use, and some tested positive for other prescription medications or illicit drugs.[4] The 3 cases that potentially involved prescription fentanyl all involved anesthesia in which multiple drugs were used.[5–7] One episode was reversed with flumazenil, and midazolam was suggested as the possible cause.[5] As Taylor and colleagues note, only in rats has fentanyl been shown to exert a direct effect on the hippocampus.[1]

Readers who just read the article title and key points will be misled, as the key points state, "[f]entanyl, a synthetic opioid, has been implicated in opioid-associated amnestic syndrome in cases of prescription and nonprescription opioid use ...".[1] This statement is not accurate. Physicians should also be reminded that fentanyl is not indicated for postoperative pain (as prescribed to this patient) or exacerbations of chronic pain (as used by the patient).

Opioids, including fentanyl, are necessary medications used in the treatment of pain and dyspnea from cancer and advanced disease. Canadian and other physicians rely on *CMAJ* for accurate information to aid them in practice, and this example falls short.

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