Letter to the Editor

"I Am in Pain!"—A Case Report of Illicit Use of Transdermal Fentanyl Patches

To the Editor: About 86 million Americans suffer from pain, which costs $100 billion yearly in work loss and medical expenses.[1,2] Fentanyl is a synthetic analgesic acting as a strong agonist at the μ-opioid receptors and is 100 times more potent than morphine.[3] Transdermal fentanyl patches contain an inert alcohol gel infused with select fentanyl doses; the patches are worn to provide constant analgesic over 48 to 72 hours.[4,5] Fentanyl patches are used widely for pain especially in palliative treatment for cancer patients who (1) have swallowing problems and cannot tolerate other parental routes, (2) have renal failure, and (3) have adverse effects from taking morphine, hydromorphone, or oxycodone.[6]

Documented methods of abusing fentanyl patches include application of more patches,[7] changing patches more frequently (this case), injecting extracted fentanyl intravenously,[8] chewing (this case) or swallowing patches,[9] inserting patches into rectum,[10] inhaling fentanyl gel,[11] and diluting fentanyl in tea.[12] The biological effects of fentanyl are similar to those of street heroin but hundreds of times more potent. It is extremely difficult to stop its absorption because fentanyl is highly lipophilic and penetrates the central nervous system easily.[13] Therefore, the illicit use of fentanyl is very dangerous and causes numerous opioid overdose deaths.[14]

Pain is common in psychiatric patients, especially in those with depression, anxiety, posttraumatic stress disorder (PTSD), substance abuse, and personality disorders.[15] Here, the case of a patient with depression, PTSD, substance abuse, and chronic back pain who abused his transdermal fentanyl patches by changing patches more frequently and chewing his used patches is presented.

Case report. Mr A, a 62-year-old white man and a Vietnam War veteran, had a past medical history of *DSM-IV-TR*[16] major depressive disorder (MDD), PTSD, and polysubstance dependence (alcohol, cocaine, heroin, marijuana, methamphetamine, and prescribed pills). He was diagnosed with chronic low back pain and had been treated with various oral narcotic analgesics by his private pain management physician. Recently, Mr A overdosed on his prescribed oral narcotic analgesics, developed respiratory depression, and was hospitalized and treated with mechanical ventilation. To avoid possible future abuse or overdose on his prescribed oral narcotic analgesics, Mr A's pain specialist physician discontinued his oral narcotic analgesics and started him on transdermal fentanyl patches that release 25 μg/h over 72 hours for his chronic low back pain.

Approximately 2 months after he was started on the fentanyl patches, Mr A presented to the psychiatry clinic for follow-up treatment of his MDD and PTSD. He was still depressed and could not fall asleep mainly secondary to his severe low back pain. Also, Mr A reported that he had started abusing his fentanyl patches by changing them every 48 hours instead of every 72 hours as prescribed. After educating Mr A about medication compliance, side effects, and the fatal risk of abusing the fentanyl patches, we instructed Mr A to apply his fentanyl patches every 72 hours as prescribed. In addition, we referred Mr A to an addiction therapist to receive weekly psychotherapy immediately.

During his first psychotherapy session, Mr A appeared to be very sedated and kept chewing on something with constant mouth movement. Because Mr A had been taking aripiprazole and duloxetine for his depression, side effects of tardive dyskinesia or extrapyramidal symptoms from these medications should be considered. However, when Mr A was asked what he was chewing on, he reluctantly admitted that he had been chewing on his used fentanyl patches after cutting them into small pieces because he stated, "I am in pain!" Again, we educated Mr A about the danger of abusing fentanyl. In addition, we instructed Mr A's wife to keep all of his fentanyl patches (both new and used) away from him and to destroy all his used fentanyl patches as the manufacturer instructed by cutting the fentanyl patches into small pieces and then flushing them down the toilet.[4] After Mr A's private pain specialist was informed about his illicit use of the fentanyl patches, he stopped prescribing them and started Mr A on low-dose hydrocodone/acetaminophen, which Mr A's wife keeps and distributes to him as prescribed. Since then, Mr A has become more alert and oriented and has felt physically better.

In clinical practice, psychiatrists should be aware that chronic pain is closely associated with a variety of psychiatric diseases[15] and should be vigilant to the high risks of the illicit use of pain medications in psychiatric patients. The early diagnosis and treatment of illicit use of pain medications will be beneficial or even life-saving for many psychiatric patients.

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