

Meperidine Withdrawal Syndrome Associated with Low Dose Short Term Use

Serkan Ocal^{1*}, Murat Korkmaz¹, Ruhsen Ocal², Abdullah Emre Yıldırım¹, Reskan Altun¹ and Haldun Selcuk¹

¹Öğretim Üyesi, Ankara Bahçelievler Tıp Fakültesi, Ankara, Türkiye

²Öğretim Üyesi, Ankara Bahçelievler Tıp Fakültesi, Ankara, Türkiye

*Corresponding author: Serkan Ocal, Baskent University Faculty of Medicine, 06500, Bahçelievler, Ankara, Turkey, Tel: 905323950041; Fax: 90-3122152962; E-mail: serkanocal75@yahoo.com

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Abstract

Analgesics, including opioids such as meperidine are used for treatment of abdominal pain caused by acute pancreatitis. Meperidine withdrawal syndrome is usually seen after long-term use. We present here an acute pancreatitis patient who experienced meperidine withdrawal syndrome after short term use and treated successfully with tramadol and deksketoprofen.

Keywords: Meperidine; Withdrawal syndrome; Acute pancreatitis

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bradykinins, and proteases such as trypsin, all of which might participate in the generation of acute pancreatitis [7].

This pain severity might be from mild discomfort to severe ranging from tolerable. Pain control is an important step in treatment of acute pancreatitis. An observational multicenter study on the treatment of acute pancreatitis in Italy demonstrated that analgesics were graded according to the severity of the pain in routine clinical practice; patients with mild acute pancreatitis received mainly NSAIDs and tramadol, whereas patients with severe pancreatitis received a high percentage of opioids or an association of analgesics including NSAID's, tramadol, and opioids [8].

Parenteral narcotic analgesics to treat severe pain of patients with acute pancreatitis is often applied. Meperidine is an opioid with high addiction potential and depending on the use of meperidine different side effects are described and withdrawal syndrome is one of them. Meperidine effect begins rapidly, reaches the highest level at 8-12 hours, and ends in 4-5 days. Meperidine abuse and dependence have been reported especially among healthworkers and patients with chronic pain [9,10]. Literature lacks of the data related with withdrawal syndrome occurred after short-term infusion of meperidine. Our patient took two doses of 50 mg intramuscular meperidine and afterwards 36 hours of infusion in decreasing manner during the last 24 hours and signs and symptoms related with withdrawal syndrome began three hours after ceasing the infusion. Normeperidin is meperidine's metabolite and is thought to be responsible from side effects such as analgesia, sedation, irritability, hyperreflexia, tremor, myoclonus, generalized tonic clonic seizures. Our case did not experienced such side effects during treatment however after discontinuation meperidine infusion signs and symptoms emerged so we decided to describe the situation as withdrawal syndrome. Meperidine withdrawal syndrome is usually seen after the long-term use such as for chronic pancreatitis pain, malignancy-associated pain or neuropathic pain. Initially patients seem to be in discomfort, anxious and irritable without having any reason for these symptoms. Symptoms begin with a sense of unease, anxiety and alarm for which there is no apparent reason. Afterwards they progress to mild paranoid thinking and to visual and auditory hallucinations with great agitation and fear, sometimes with the patient running out of the hospital, and requiring restraint and heavy

sedation. However to the best of our knowledge we have not noticed any article mentioning about withdrawal syndrome related with short term meperidine use.

In conclusion many physicians use meperidine for different reasons either in short or long term periods. Although most of us are aware of serious side effects or addiction risk especially during long term use we should keep in mind that short term use such as for acute pancreatitis could have consequences related with side effects or withdrawal. To think the possibility of this diagnosis and tramadol and deksketoprofen trometamol treatment could rapidly and easily solve the problem.

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