The Opioid-Free ED: Coming Soon to a Hospital Near You

Fran Lowry | February 28, 2015

The time has come to seriously explore the use of nonopioid analgesia for managing pain in the emergency department, said experts speaking at the American Academy of Emergency Medicine 21st Annual Scientific Assembly in Austin, Texas.

"Relying on opioids as the primary analgesics for moderate to severe pain is inadequate, unsafe, and costly," said Sergey Motov, MD, from Maimonides Medical Center in Brooklyn, New York.

"We have nonopioid analgesics that we can use for managing certain conditions in the emergency department, and the time has come to explore their use," Dr Motov told *Medscape Medical News*. "I'm not quite ready to say that we should just stop using opioids, period, because there are special situations and indications where nothing works better than opioids, but there are alternatives."

"We all have come to realize and understand by now that pain is a complex and multifactorial phenomenon. I began thinking that there are multiple channels, enzymes, and receptors that are responsible for recognition, transmission, and modulation of pain," Dr Motov explained. "If we can specifically target those channels, enzymes, and receptors by combining different classes of analgesics geared to different targeted sites, and administer them through different routes, we probably can provide superior analgesia to what we can achieve with opioids, with much fewer side effects."

The advantages of dual or triple analgesic combinations is that they provide minimal sedation and lead to shorter hospital stays, he added.

One type of pain that patients in the emergency department often present with is renal colic.

"Renal colic is acute visceral pain, and certain channels and certain enzymes are responsible for it. You can use several different channel-blocking agents, such as lidocaine, and an enzyme inhibitor, such as Cox-1 or Cox-2. We can deliver these drugs intravenously and provide superior analgesia with a minimum of side effects without using opioids," said Dr Motov.

"We can use intravenous lidocaine as a sodium-channel-blocking agent and we can use intravenous Cox-3. By combining these 2 medications, once again we can produce superior analgesia," he said. The concept is to target different receptors and channels that are responsible for painful conditions.

"I am just trying to come up with a feasible, practical solution or alternative to opioid analgesia in the emergency department," Dr Motov explained. "For now, it is an alternative, but who knows what may happen later on. Perhaps we will be able to eliminate opioids altogether, which would be fantastic."

Table. Nonopioid Alternatives for Pain Management

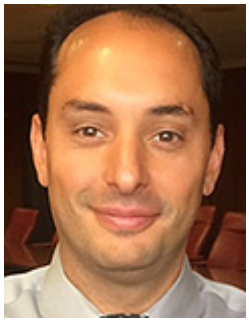
Condition	Analgesic
Renal colic	acetaminophen, indomethacin, ketorolac, lidocaine, rectal indomethacin
Back pain	acetaminophen, diazepam, ibuprofen, lidocaine patch, methocarbamol, trigger-point myofascial injections
Headache	diphenhydramine, ketorolac, metoclopramide, prochlorperazine, sumatriptan,
Musculoskeletal pain	acetaminophen, ibuprofen, lidocaine patch, naproxen, nitrous oxide, regional nerve blocks
Neuropathic pain	clonidine, gabapentin, ibuprofen, nortriptyline, pregabalin
Burns	acetaminophen, bupivacaine, ibuprofen, naproxen, nitrous oxide

Sickle cell crisis	hydroxyurea, ibuprofen, ketamine, nitrous oxide
Chronic pain	gabapentin, ibuprofen, lidocaine patch, prednisone, trigger-point injections
Pediatric pain	acetaminophen, ibuprofen, ketamine, nitrous oxide

Opioid analgesics do have their place, such as in the management of acute traumatic injury and acute visceral pain, but there are problems associated with their use, said Dr Motov.

For one, opioids are not properly titrated in the emergency department. "Studies show that only a minority of patients have their dose of opioid titrated. The percentages range from 2% to 20%," he explained.

In addition, there is no consensus on the optimum dose of opioids, and the adverse effects — including nausea, vomiting, and constipation — are well known. But the most serious problem is that prescription opioid abuse is emerging as the number 1 cause of drug abuse in the United States, he said.


Dr Sergey Motov

For these reasons, "I think it would probably be best for everybody if we reduced the use of opioids in the emergency department," Dr Motov said.

"I believe that we can aspire to having an opioid-free emergency department, but the reality is that there are some painful conditions that may still warrant the speed and power of opiate relief," said Robert Glatter, MD, from Lenox Hill Hospital, New York City, who serves on the editorial board of *Medscape Emergency Medicine*.

"In patients not getting pain relief from NSAIDs in renal colic, or patients with open or displaced long bone or hip fractures, opiates can quickly relieve pain and suffering," Dr Glatter told *Medscape Medical News*.

Although subanesthetic doses of ketamine could be a reasonable alternative to opiates, there still might be a need to use small doses of opiates in extremely painful conditions, when a patient is not getting relief, he said.

"There are a number of potentially useful and efficacious alternatives to opiates, but we have not arrived at that point just yet," Dr Glatter said.

He acknowledged the challenge of dealing with narcotic-seekers who present to the emergency department.

Prescription Monitoring Essential

"Every emergency physician dreads the difficult patient who seeks narcotics, and we all have been on the front lines using tactics to avoid prescribing to this problematic group of patients. In these cases, it is an achievable goal, with the right approach," Dr Glatter said.

"Unless emergency physicians have rapid, easy, and adequate access to prescription-monitoring databases, it is difficult to know a patient's history," he said. "With a national cloud-based electronic medical record, we could achieve better communication among medical providers and limit narcotic prescribing."

It is important that medical providers attempt to use alternative choices to narcotics when caring for patients, when and if possible, he said, but he added that he does not think that emergency departments are contributing to the current epidemic of narcotic abuse.

"Emergency physicians receive focused training to be wary of patients seeking narcotics. I do not believe that the narcotics prescribed judiciously in emergency contribute to our national epidemic of narcotic abuse," said Dr Glatter.

Dr Motov and Dr Glatter have disclosed no relevant financial relationships.

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