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**PAIN UPDATE:** New data presented at the recent 22nd annual meeting of the American Academy of Pain Medicine indicates duloxetine may benefit women with fibromyalgia. Also presented at the San Diego meeting was a trial looking at two oral sustained-release opioids head-to-head in the management of chronic low back pain. Freelance medical journalist John Schieszer was at the conference and files these reports.

## **PAIN: Epidural clonidine safe for additional pain control**

By John Schieszer

San Diego | Epidural clonidine may prolong and intensify analgesia when mixed with local anesthetics and opioids without increasing the incidence of hypotension and bradycardia, according to new data presented at the annual meeting of the American Academy of Pain Medicine.

"It is effective and safe and it prolongs the effects of opioids and local anesthetics. The continued effects tend to last weeks and even months and these patients didn't have that with just extended epidural injections. This approach may double the time a patient is able to suppress their pain," said lead study investigator Dr. Alexander Krakovsky, medical director of the Pain Management Centre in San Luis Obispo, Calif.

The primary medications used with clonidine were marcaine and fentanyl. The dose of marcaine ranged from 4 mL to 6 mL and the dose of fentanyl ranged from 50 mcg to 400 mcg. The doses of clonidine ranged from 25 mcg to 250 mcg. Standard American Society of Anesthesiology monitoring was conducted intraoperatively and postoperatively.

Alpha-2 agonists could be key

While clonidine has not been used in the past for the treatment of pain in an ambulatory pain centre, it was theorized that it may be beneficial because alpha-2 adrenoreceptors are located in the superficial laminae of the spinal cord and enhance analgesic actions of local anesthetics and opioids. Clonidine blocks conduction of pain-mediating C and A-delta fibres and increases potassium conduction, according to Dr. Krakovsky. He said clonidine may cause local vasoconstriction and therefore prolong the action of analgesics.

After these injections, numerical pain scores decreased by 50% to 85% and all the patients remained hemodynamically stable. In the recovery room, bradycardia was found in three patients and hypotension in two. These conditions were not hemodynamically significant and no additional treatments were required, Dr. Krakovsky said. No delays in discharge occurred.

He said there had been a common fear that there would be prolonged respiratory depression after epidural injection of clonidine but that has not been the case. He noted that systemic arterial blood pressure and heart rates remained stable in these patients during and after the procedures.

"No steroids are required and that is important," Dr. Krakovsky said in an interview. "These patients have pain for years and years and take medications for decades so constant use of steroid injections takes its toll, often leading to heart disease, bone loss and diabetes, even though the steroids lower inflammation. So with long-term use there are high costs with steroid injections. This is another tool to think about for treating pain syndromes."

Dr. Tim Smith, a clinical instructor of medicine at Washington University in St. Louis, said this study may point toward a new treatment option for these patients, but controlled trials will first need to be conducted.

More analysis urged

"It is no surprise to me that someone found that alpha-2 agonists were helpful in treating pain conditions. We have used tizanidine for years adjunctively as an oral treatment for chronic daily headaches. This paper describes a huge number of injections over a long period of time, which obviously makes it very significant. On the other hand, it could be argued that this much open-label uncontrolled data is not necessary and what we really would like to see is a prospective, randomized, controlled trial," Dr. Smith told the Medical Post.