The New York Times' coverage of the so-called "opioid crisis" (1) has been generally dreadful, but I was still surprised with a new article by Gina Kolata - the paper's science reporter - entitled "10 Medical Myths We Should Stop Believing. Doctors, Too [1]."

Ms. Kolata usually gets it right, so I was a bit surprised when I ran into #5:

**To treat emergency room patients in acute pain, a single dose of oral opioids is no better than drugs like aspirin and ibuprofen.**

Kolata cites a 2017 JAMA Network paper [2] which makes this claim; it didn't sound any better two years ago than it does now. That's because "Effect of a Single Dose of Oral Opioid and Nonopioid Analgesics on Acute Extremity Pain in the Emergency Department - A Randomized Clinical Trial" is a giant mess, no doubt driven by opioid hysteria, which hasn't let up, despite its "factual" skeleton being gradually picked to bits.

With only a passing glance it might be tempting to believe Andrew K. Chang, MD and colleagues' conclusion that is cited by Ms. Kolata, but it takes only a little more than a glance to see serious flaws in the JAMA Network paper. Here are some of them.

The study included four groups of people in pain (416 total) who were seen at either of two emergency departments at the Montefiore Medical Center in the Bronx between 2015-16. The four groups that were compared:

- Group 1 received 400 mg of ibuprofen plus 1000 mg of acetaminophen.
- Group 2 received 5 mg of hydrocodone and 300 mg of acetaminophen.
- Group 3 received 5 mg of oxycodone plus 325 mg of acetaminophen.
Problem #1 - Dose

If the four groups were chosen to make a point then the authors did a splendid job. There is a sleight of hand here and it's fairly obvious:

- The maximum therapeutic single dose of Advil (ibuprofen) is 400 mg. Doses higher than 400 mg have not been shown to be more effective.
- The maximum recommended single dose of acetaminophen (Tylenol) is 1,000 mg. Higher doses can cause irreversible liver damage.
- The usual adult dose of hydrocodone is 5-10 mg.
- The usual adult dose of oxycodone is 5-15 mg. (2)
- The usual adult dose of codeine is 15-60 mg.

What's going on here should be "painfully" obvious. The study was designed to compare the analgesic power of the highest permitted dose of Advil and Tylenol with the lowest effective doses of hydrocodone and oxycodone. That's not playing fair. Here are some "real life" analogies:

Peter Dinklage weighs more than Andre the Giant (Because Andre the Giant is dead).

or...

The Boston Red Sox are better than the New York Yankees (But only if the Yankees are playing with blindfolds on).

If the group ran this same trial with a realistic, not absolute minimum, opioid dose I'm betting we'd see very different results.

Problem #2 - The elephant in the kidney.

The study group was limited to patients with acute extremity pain - "pain originating distal to and including the shoulder joint in the upper extremities and distal to and including the hip joint in the lower extremities."

Two words: Kidney. Stones. Throw those bad boys in there and let's see how well Advil and Tylenol work. And you wouldn't even need to use a subjective pain scale. A decibel meter would provide measurable evidence. So would an obscenity meter.

Problem #3 - Opioids to the rescue - for some.

Approximately 18% of the patients received "rescue analgesia." In other words, when some poor soul was lying there screaming his or her head off they were given oxycodone or morphine. So, 73 patients didn't get adequate relief from either Advil/Tylenol or low-dose opioids. Is it rude to ask why they were given insufficient pain medicine in the first place? And doesn't this sort of prove that opioids are superior for pain relief? The 73 did not get "rescue Tylenol" because a) some of them had already been given the maximum dose, and b) in most cases Tylenol is worthless as a pain killer. Does this 18% skew the numbers? Don't bet on "no."

Problem #4 - If you have pain don't go to Montefiore.
An obvious question - why would anyone want to go to an ER with "moderate to severe acute extremity pain" when 75% of the patients in this study weren't even given an opioid? Perhaps I'm being overly picky but human experimentation in the ER doesn't sound like such a swell idea. Neither is making people suffer for no reason.

Another obvious question - why??? Has the medical world gone so bats### crazy that we are now worried that a single dose of 10-15 mg of oxycodone is going to addict anyone? No, it's not. The Chang paper was about ideology, not medicine. Just like the rest of the "opioid crisis."

NOTES:

(1) As I have written many times in the past, we are not having an "opioid crisis." We are having a fentanyl crisis.

(2) Oxycodone is 1.5-2-times stronger than hydrocodone, so these recommended doses don't make a lot of sense. I have no idea why there is an apparent discrepancy in dose.

(3) I have written about the Montefiore study in more detail. (See Advil Works As Well As Opioids For Acute Pain? Not So Fast [9].)


Links