Need General Surgery? Ignore The Surgeon General

By Josh Bloom — July 8, 2019

Surgeon General Jerome Adams, M.D.
Is Prescribing Some Real BS.

Just what we don't need. Another anti-opioid (pro-pain) zealot spreading the false gospel. But we have one anyhow - US Surgeon General Jerome Adams, M.D.

On July 3rd Dr. Adams Tweeted the following:

Isn't that swell? Being obsessed over whether post-op patients do or don't need a few doses of opiate pain medication instead of focusing on the patient's individual needs? Since when did recovery from surgery become a contest?

"My patients can survive a knee replacement with only ibuprofen. They may scream a little, but eventually, they stop. Usually."

"Oh yeah? My patients don't even need general anesthesia for spinal fusion! We just strap 'em down, stick a couple of acupuncture needles at their ear and... voila! A titanium rod across four cervical vertebrae."

Sort of an analgesic version of "Name The Tune."

Adams' Tweet the next day was worse...
Wow! Tylenol works better than morphine. That must be one hell of a study.

It is - one hell of a terrible study. Here's why.

Adams was referring to a 54-person randomized clinical trial of pain control following rib fractures, which are notoriously painful. The trial, which was conducted in an emergency department Iran, compared IV Tylenol (1000 mg) and morphine (0.1 mg per kilo of body weight) (1). The result? Tylenol worked as well as IV morphine for relief of pain from rib fractures, that is until you bother to read the paper [1], which was published in the journal *Emergency (Tehran)*. On the slight chance that you're not a subscriber, here's a summary.

- Thirty minutes post-administration of drug the mean pain score on a scale of 1-11 was 5.5 for the morphine-treated patients and 4.9 for the Tylenol-treated patients. These two numbers make up the "evidence" behind Dr. Adams' claims of equivalence of Tylenol and morphine. Except the data aren't even close to statistically significant - P = 0.23. No, Tylenol is not equivalent to morphine; there is no way to tell from this study. Its numbers are meaningless.

Even the authors seem to acknowledge this fact, assuming you can figure out what they're talking about:

> *The success rate reported for this drug in this study was 80% that although [sic] did not have significant difference with morphine (58.6%), it had more improvement rate, clinically.*

Huh?
ACSH advisor, biostatistician Dr. Stan Young had this to say.

The rage these days is to say OTC pain med is as good as morphine etc. Here the authors claim victory if there is no difference. "Proving equal" is a different game. You just have to worry about statistical power. Just run a small, underpowered study and you can easily get no difference (victory).

It gets worse...

- There was no control group, so we don't know if either group got relief from the medicine or the reduction in pain score was due to a placebo effect.

The initial pain score of both groups was "the same" but with P = 0.19 this may or may not be true. The group that received the Tylenol could have come in with more pain, less pain, or no difference. We cannot tell from the data.

- The success rate (defined as a 3 point reduction in pain score) was 80% for Tylenol and 59% for morphine. That isn't significant either. P = 0.09. Even the authors acknowledge this:

"The success rate reported for this drug in this study was 80% that although did not have [sic] significant difference with morphine (58.6%), it had more improvement rate, clinically."


- When there was a treatment failure after 30 minutes (inadequate pain relief), morphine was given as a rescue therapy. This automatically skews the results. It's like saying "Tylenol works as well as morphine except when it doesn't." Nor do the authors tell us how often this happened.

Finally, we have this:

"Presentation of side effects was similar in both groups."

Are they kidding? All we've been hearing for a decade is how dangerous opiate analgesics are and there was no difference in side effects between the Tylenol and morphine groups? Was there any morphine in the morphine, because I can't think of any other explanation for this.

This is what our Surgeon General used to "inform" us that IV Tylenol works as well as morphine - a 2015 paper in a journal with maybe two readers, which is filled with a whole lot of information, none of it valid.

What a joke.

NOTE

(1) A dose of 0.1 mg per kilo of body weight (7 mg for a 70 kg patient) is within guidelines for an initial dose of morphine.