

Fast Facts on Pain Management

FAST FACTS #7 – Increasing an Opioid Dose

CASE STUDY:

Mr. S. is a 70-year old patient with lung cancer and metastases to the bone. He is receiving MS Contin 30mg q 12 hours for pain with a rescue dose of Morphine 5mg q 2 hours prn. Today he reports that the pain is getting progressively worse, rating it at 7/10. There is some relief with the rescue dose of Morphine for about 3 hours to a 3/10 and then it gets severe again. The pain is in his lower back at the same location that he has been having in the past month.

What would you recommend to the physician for pain relief.

Main Teaching Points

There are guidelines that can help in the understanding of opioid dose escalation. Review guidelines for opioid dose escalation before discussing your recommendations with the physician.

Guidelines for analgesic escalation:

Dose escalation of opioids should be done on the basis of a percentage increase. In fact, this is easily done when combination products are prescribed by going from one to two tablets. Going from 1 to 2 tablets represents a 100% dose increase.

In general, **patients do not notice a change in analgesia when dose increases are less than 25% above baseline.**

Reasonable guidelines include: for moderate to severe pain increase by 50-100%, for mild-moderate pain increase by 25-50%, irrespective of starting dose. When dose escalating long-acting opioids do not increase the long-acting drug more than 100% at any one time, irrespective of how many breakthrough doses have been used. For elderly patients, or those with renal/liver disease, dose escalation percentages need to be reduced.

The recommended frequency of dose escalation depends on the half-life of the drug. Short-acting oral single-agent opioids (e.g. morphine, oxycodone, hydromorphone), not combination products, can be safely dose escalated every 2 hours. Sustained release oral opioids can be escalated every 24 hours. Duragesic (Fentanyl transdermal), no less than every 72 hours is recommended.

References: 1. Physicians Desk Reference, 2000.
2. Improving End-of-Life Care: A resource guide for physician education. Weissman DE and Ambuel B. Medical College of Wisconsin, 1999.
3. Handbook of Cancer Pain Management. Wisconsin Cancer Pain Initiative, 5th Edition, 1996.

For Mr. S, who is elderly, frail, and having severe pain, you might consider recommending a 50% increase in the MSContin 30 mg q 12°. You might also consider a recommendation to increase the rescue dose to Morphine 10 mg q 2° prn.