

NURSING MANAGEMENT OF COUGH IN PEOPLE WITH COVID-19

COUGH DURING COVID-19



Dry cough is an early sign, can be severe and even lead to broken ribs and significant pain



Usually starts between day 2-14 after exposure, although also reported later in course

Reported in up to 60% of patients



Don't forget other causes of cough: asthma, gastroesophageal reflux disease (GERD), postnasal drip/sinusitis, smoking, medications such as ACE inhibitors or beta blockers

PHARMACOLOGIC MANAGEMENT

There are no strong data supporting any agent over another – the choice is often trial and error

◇ Treat underlying cause: antivirals, antibiotics, diuretics if fluid overload, PPIs if GERD

Two primary categories of medications:

Antitussive

- Dextromethorphan 10 - 20 mg by mouth every 4 hours as needed (technically an opioid but antitussive effect appears to be related to NMDA antagonism)
- Benzonatate 100 - 200 mg by mouth every 8 hours as needed

For patients quarantined at home, provide education regarding the contents in many over-the-counter medications and the potential for duplication and even overdose. Medications for a variety of conditions (allergy, arthritis cold, cough, headache, pain, sinus, sleep) often contain multiple agents, including acetaminophen, dextromethorphan, antihistamines (such as diphenhydramine) and decongestants (pseudoephedrine or phenylephrine).

Expectorants

- Guaifenesin (thins mucous – unclear if helpful for dry cough) 200- 400 mg by mouth every 4-6 hours as needed

PHARMACOLOGIC PALLIATIVE MANAGEMENT: OPIOIDS

- Most patients with mild to moderate cough will not require an opioid, although those with severe, distressing cough may benefit.
- Does not have to be codeine – all opioids can relieve cough!

Codeine is metabolized by CYP 2D6 - some are missing this enzyme and unable to metabolize codeine therefore experiencing no effect, while others are ultra-rapid metabolizers, increasing risk of overdose

- Suggested starting doses:
 - **Codeine** 15-60 mg PO every 4 hours as needed
 - **Hydrocodone** 5-10 mg PO every 4 hours prn
 - **Morphine** 5 -10 mg PO every 4 hours prn
 - **Oxycodone** 2.5-5 mg PO every 4 hours prn
- Monitor for and prevent the usual adverse effects of opioids such as nausea, constipation, sedation and others



Routes – helpful tips: Liquid formulations of opioids may be helpful; be cautious of the combined effect of other agents in some of these elixirs or solutions, such as acetaminophen, guaifenesin, homatropine or chlorpheniramine, which will limit the maximum available dose.

NONPHARMACOLOGIC MANAGEMENT



- Drink plenty of fluids, warm drinks may be more soothing for some
- Chicken soup or vegetable broth
- Honey or other sweet syrup



- Cough drops/ hard candies
- Humidifier to loosen mucous
- Positioning – elevate head of bed



Educate patients to cover their face during cough, throw away used tissues in a lined trash can and wash their hands for 20 seconds.

REFERENCES

Centers for Disease Control and Prevention. Coronavirus (COVID-19). <https://www.cdc.gov/coronavirus/2019-ncov/index.html> (accessed May 11, 2020). | Donesky D. Dyspnea, cough, and terminal secretions. In BR Ferrell & JA Paice (eds). Oxford Textbook of Palliative Nursing, 5th edition, pp 217-229. New York: Oxford University Press, 2019. | ELNEC –<https://www.aacnursing.org/ELNEC/COVID-19> | Fast Facts #199: <https://www.mypcnow.org/wp-content/uploads/2019/02/FF-199-cough-opioids.-3rd-ed.pdf> (accessed May 11, 2020).

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