

CLINICAL PRACTICE GUIDELINE MODULE

Objectives:

At the end of this module, learners will be able to determine and demonstrate whether a clinical article describing, advocating or dismissing a clinical practice guideline has drawn conclusions that are both *valid* (true) and *applicable* (feasible) in one's own clinical practice/patient in question.

Clinical Scenario:

As a pediatrician, you received a voice-mail from the mother of a 13 year old patient of yours who was recently diagnosed with acute myeloid leukemia and had just received a bone marrow transplant (BMT). She was crying while leaving you a message that her daughter oxygenation was deteriorating over the course of the past several days while having fevers and increasing CO₂. The doctors on the BMT floor thought that she was most likely having a lung infection and transferred her to the Pediatric Intensive Care Unit where she was started on noninvasive positive pressure ventilation. The mother was unsure as to what that was and wanted you to help her understand what was going on.

Before you call the mother back you question whether noninvasive ventilation was the right course of action for an acutely deteriorating patient in respiratory failure. You decide to look up whether there are guidelines on utilizing noninvasive ventilation in the acute care setting before resorting to tracheally intubating immuno-compromised patient. You go to MEDLINE at the National Library of Medicine website via PubMed. You type the terms "guidelines", "noninvasive", and "positive pressure ventilation." You find an article titled "Clinical practice guidelines for the use of noninvasive positive-pressure ventilation and noninvasive continuous positive airway pressure in the acute care setting."

Attachments and teaching tools:

1. Keenan SP, Sinuff T, Burns KE, Muscedere J, Kutsogiannis J, Mehta S, Cook DJ, Ayas N, Adhikari NK, Hand L, Scales DC, Pagnotta R, Lazosky L, Rocker G, Dial S, Laupland K, Sanders K, Dodek P; as the Canadian Critical Care Trials Group/Canadian Critical Care Society Noninvasive Ventilation Guidelines Group. Clinical practice guidelines for the use of noninvasive positive-pressure ventilation and noninvasive continuous positive airway pressure in the acute care setting. *CMAJ*. 2011 Feb 22;183(3):E195-214. Epub 2011 Feb 14.
2. Guyatt G, Roman Jaeschke, Mark Wilson, Victor Montori, and Scott Richardson. What is evidence-based medicine. In Guyatt G, Rennie D, Meade MO, Cook DJ. *Users' Guides to the Medical Literature: A Manual for Evidence-based Clinical Practice*. 3rd ed. New York, NY: McGraw-Hill; 2015.
3. Critical appraisal form for an article on Clinical Practice Guideline.