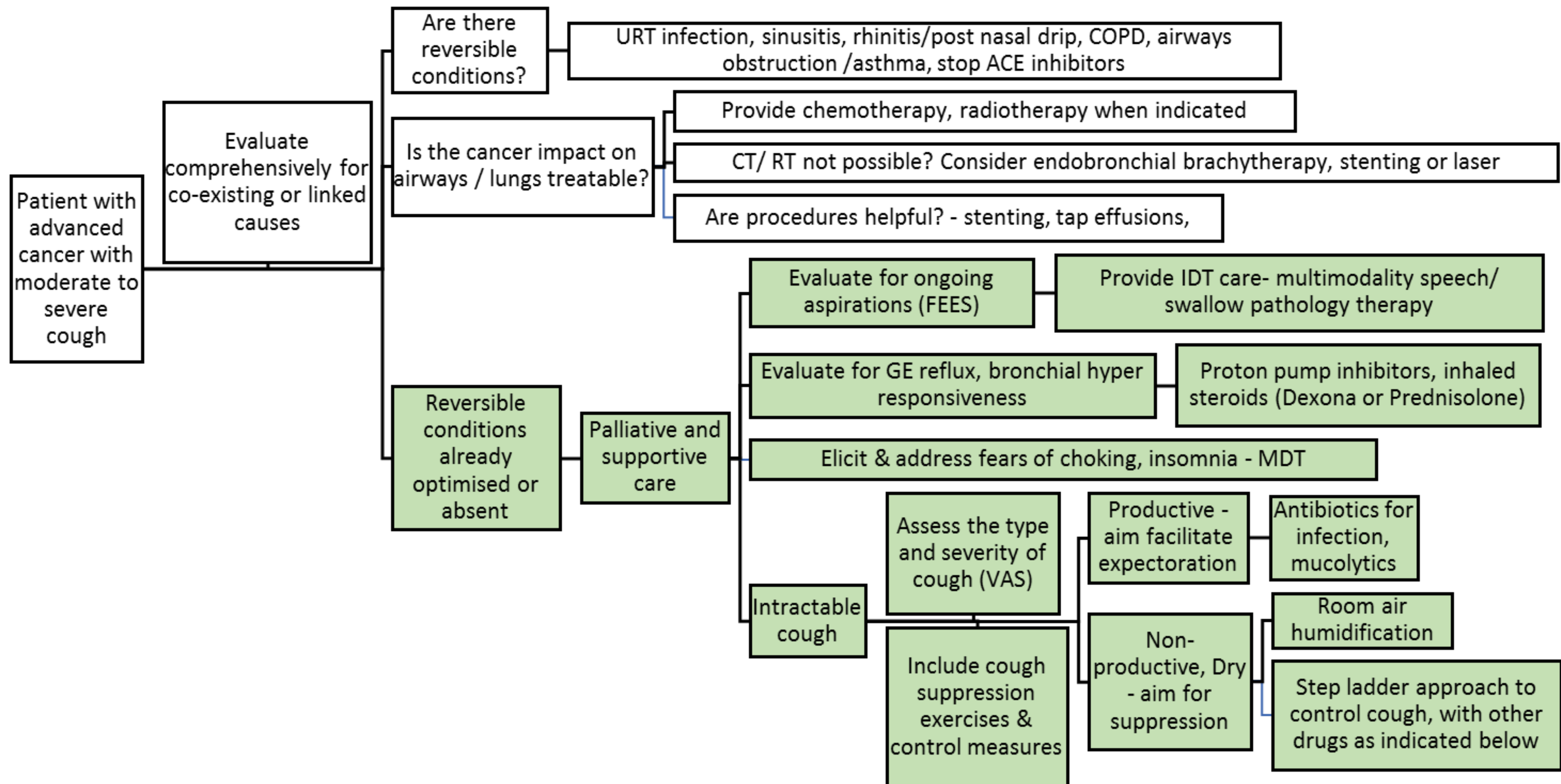
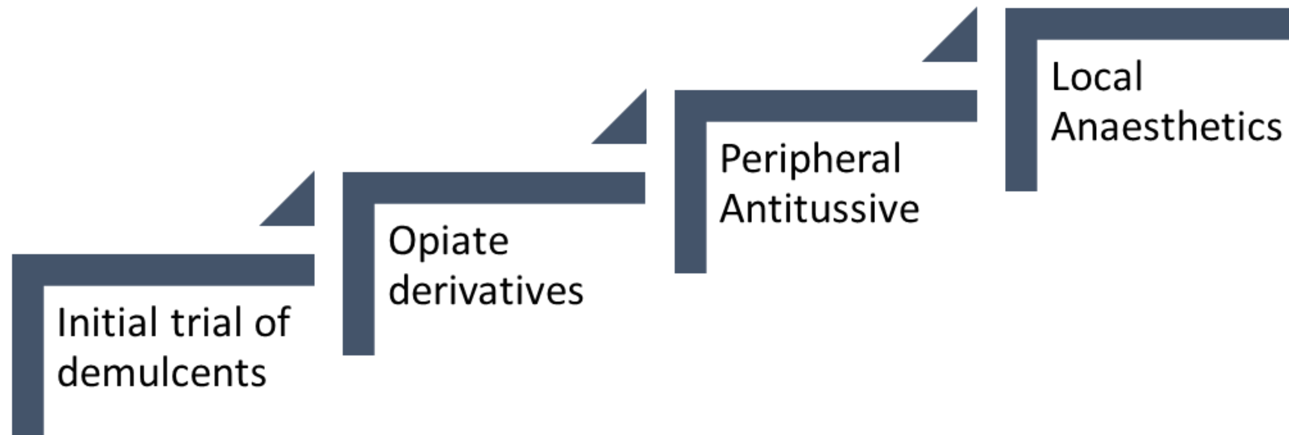
NCG Guidelines - Cough

Approach to Managing Cough in Cancer Patients[1]



[1] Cough Severity Visual Analogue Scale (VAS): a 100mm line marked with “no cough” at 0mm and “worst cough” at 100mm. Patients are asked to mark along the line to represent their perceived cough severity.

Medications - Step ladder Approach.[2] (Choice of treatment may be dictated by availability rather than pharmacologic parameters)



1. **Demulcents: An initial trial for mild-moderate non-productive cough**
    a. Demulcents - containing soothing substances such as syrup and glycerol taste good and are harmless and inexpensive
    b. Mucolytics - N-Acetylcysteine or Steam inhalations or Nebulised saline or Carbocisteine
    c. Muco -kinetics - Bromhexine 5 ml TDS / QDS

2. **Opiate-derivative - titrated to an acceptable side-effect profile.** (Known to improve sleep if given at bed-time)
    a. Morphine
        i. 2.5 - 5 mg Q 4hrly in opioid naïve; 25% dose increase in those already on opioids
        ii. Change to 5-10 mg slow-release morphine BD once effect is established
    b. Dihydrocodeine 10 mg TDS / Pholcodine 5-10 ml of 5mg/5 ml – difficult to access
    c. Dextromethorphan 10-20 mg 4-6 hrly - NMDA antagonism at cough center/demulcent

[2] Molassiotis A, Bailey C, Caress A, Tan JY. Interventions for cough in cancer. Cochrane Database Syst Rev. 2015;(5):CD007881.

d. Methadone as linctus
    i. Single dose 2 mg (2 mL of 1 mg/mL solution) – only by experienced specialist
    ii. When cough + Pain (Nociceptive + Neuropathic)
e. Codeine – not preferred due the poorer side-effect profile of the latter.

3. **Peripherally acting antitussive – for opioid-resistant cough** (Current availability in sub-therapeutic dose)
    a. Inhaled cromoglycate - 10 mg X QDS (reduces response of C fibres at peripheral lung)
    b. Moguisteine - 100-200 mg X TDS – (reduces response of Rapidly Acting Receptors (RAR))
    c. Levodropropizine - 75 mg X TDS - (reduces response of C fibres)

4. **Local Anaesthetics (**inhibits stretch receptors in the Lower Resp Tract, lungs, pleura)
    a. **Benzonatate** -100-200 mg X TDS or as nebulization
    b. **Nebulized lignocaine/bupivacaine –** Inhibit sensory nerves + Central effect
        i. 5 ml: 2% lignocaine or 0.25% bupivacaine
        ii. Can increase the risk of aspiration - No food / drinks for at least an hour after treatment
        iii. The first dose should be given as an inpatient to rule out reflex bronchospasm
        iv. Avoid in elderly, and before feeding.
        v. Useful as bed-time suppressant
5. Sedation for symptom control may be considered on very rare occasions - If patient is unresponsive to any of the above – refer to NCG guidelines on the same

Other drugs

a. Antibiotics - will need to be considered on a case by case basis
    i. Indicated when there is a symptomatic pneumonia in a patient with pre-morbid ECOG status $\leq$ 2
    ii. When ECOG > 3 - the beneficence of a short course of a broad-spectrum antibiotic varies. It is not useful in patients with limited prognosis when they have had several prior courses of antibiotics; do not have sufficient time left for antibiotics to benefit, or when there is loss of the oral route; and institution based parenteral therapy adds to the distress.
b. Nebulized bronchodilators – short and long-acting

c. Steroids -Dexamethasone 4-8 mg / day or Prednisolone 30 mg daily for 7 days - For reducing pressure on the airway due to direct tumour oedema
d. If bronchorrhea – use antisecretory medications - Ipratropium, glycopyrrolate or octreotide

Supportive Care [3, 4]

1. **Interdisciplinary Team (IDT) - Speech therapists and respiratory physiotherapist**
    a. **Cough suppression exercises** - including education, identifying cough triggers, cough suppression techniques - pursed lip breathing, swallowing, sipping water, improvements in laryngeal and vocal hygiene and hydration, diaphragmatic breathing exercises, and counselling.
    b. **Postural drainage** to help clear sputum
2. **Room air humidification for dry cough**
3. **Emotional – address if there is fear of choking. Focus on addressing sleep disturbance due to irritant cough**

[3] Symptomatic Treatment of Cough Among Adult Patients With Lung Cancer: CHEST Guideline and Expert Panel https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6026217/#:~:text=In%20adult%20patients%20with%20lung%20cancer%20who%20require%20a%20pharmacological,where%20available%20(Grade%202C)

[4] Treatment of Unexplained Chronic Cough: CHEST Guideline and Expert Panel Report https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5831652/