Abstract Presentations

6. Alan Kaplan, Canada

Chronic cough in Primary Care, a potential algorithmic tool

www.fpagc.com
for4kids@gmail.com

Dr. Alan G. Kaplan

Chair Family Physician Airways Group of Canada
Honorary Professor of Primary Care Respiratory Medicine, OPRI
Vice Chair of the Respiratory Effectiveness Group
Past- Chair of Special Interest Focused Practice, College of Family Physicians in Respiratory Medicine.
Medical Director, Pulmonary Rehabilitation Clinics, Ontario Central LHIN

Perceive no conflict of interest with giving this presentation, but present the following companies that I have worked with or consulted for:

Astra Zeneca, Behring, Boehringer-Ingelheim , Covis, Griffols, GSK Janssen-Ortho, NovoNordisk, Pfizer, Purdue,Merck Frosst, Novartis, NovoNordisk, Sanofi, Teva and Trudel.

Cure for a Cough

The owner of a drugstore walks in to find a guy leaning heavily against a wall with an odd look on his face.

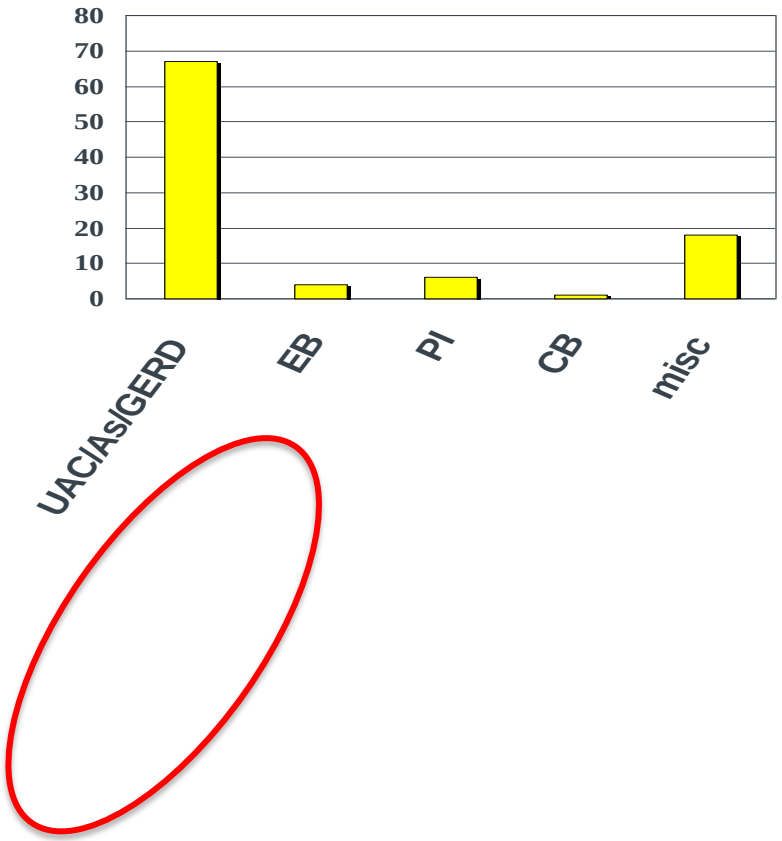
The owner asks the clerk, "What's with that guy over there by the wall?“

The clerk says, "Well, he came in here at 7 A.M. to get something for his cough. I couldn't find the cough syrup, so I gave him an entire bottle of laxatives.“

The owner says, "You idiot! You can't treat a cough with laxatives!“

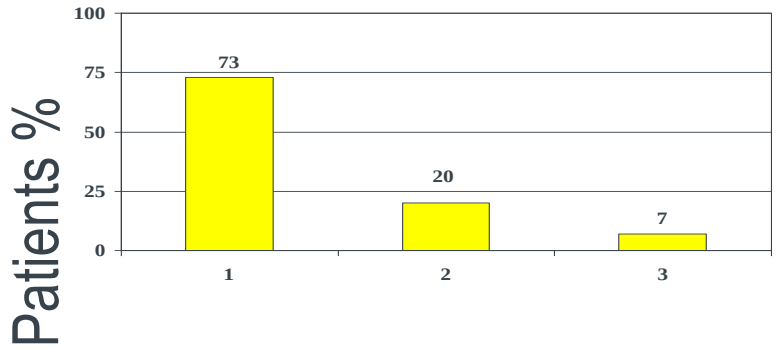
The clerk says, "Oh yeah? Look at him—he's afraid to cough!"

Causes of Cough



ACCP Chest 2006

Number of causes of cough



Number of Causes of Cough

Smyrnios *et al* Arch Intern Med 1998 158:1222

Chronic Cough: message one

Common things are common

Patients who do not respond frequently have more than one cause

GERD causes cough.

Post-infectious cough is common

- but what does this mean??

Chronic Cough: message two

You can find almost every cause of cough with three steps

History (including meds), Physical and CXR

Diff dx with normal CXR (>95%): Asthma, UACS, GERD or infection

Reasonable to give trials of therapy

Reassess and give patient hope, they are very frustrated!

Proposed Primary Care Approach to Assessing Adults with Chronic Cough

Primary Investigations

To aid in diagnosis and/or referral

- ❑ Consider duration of symptoms (chronic cough definition >8 weeks)
- ❑ Review Red Flags (see below)
- ❑ Review medical history, including potential triggers:
  - ❑ Smoking, ACE inhibitors, sitagliptin?
  - ❑ Occupational/environmental issues or travel exposure?
- ❑ Perform physical exam
- ❑ Complete chest radiograph

Cough persists

Work-up for potential underlying conditions (Reassess in 4-6 weeks at least)

Assess for and treat as needed (alone or in combination)

- ❑ **Asthma**
  - ❑ Testing: Spirometry
  - ❑ Exploratory initial treatment per guidelines if indicated
- ❑ **GERD**
  - ❑ Exploratory initial treatment per guidelines if indicated

- Consider initiating referral to secondary care while waiting for testing/treatment results
- Assess if treatment resolved chronic cough

Cough persists

While patient waits to be seen by specialist

To expedite future diagnosis

- ❑ Consider other potential causes / additional investigations
- ❑ Consider possibility of >1 cause
- ❑ Assess adherence to treatment of potential underlying conditions
- ❑ Re-evaluate patient for (subtle) symptoms
- ❑ Continue to support your patient through their journey

Red flags for more severe issues

- Hemoptysis
- Smoker >45 years with new cough, cough change or coexisting voice disturbance
- Age 55-80 years: 30 pack-year smoking history + current smoker *or* quit <15 years ago
- Prominent dyspnea, especially at rest or at night
- Hoarseness
- Systemic symptoms, including fever, weight loss, peripheral edema with weight gain
- Trouble swallowing while eating or drinking
- Vomiting
- Recurrent pneumonia
- Abnormal respiratory exam and/or chest radiograph coinciding with duration of cough

Other potential causes of chronic cough (often assessed in secondary care), including

- UACS
- NAEB
- Bronchiectasis

Additional investigations (depending on access to testing)

- 24-hour esophageal pH monitoring
- Endoscopic/videofluoroscopic swallow evaluation
- Barium esophagram / modified barium swallow
- Sinus imaging
- HRCT
- Bronchoscopy
- Cardiac workup (ECG, Holter monitoring, Echo)
- Environmental / occupational assessment
- Uncommon causes?

Adapted from 2018 ACCP Guidelines
Irwin RS et al. Chest 2018;153(1):196-209

ACE, angiotensin-converting enzyme; ECG, electrocardiogram; HRCCT, high resolution computed tomography; GERD: gastro-esophageal reflux disease, NAEB: non-asthmatic eosinophilic bronchitis, UACS: upper airway cough syndrome, PNDS: post-nasal drip syndrome; UACS, upper airway cough syndrome