


BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

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Based on

 The following succinct analysis appeared in *Pharmacist's Letter*.

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ASTHMA

New evidence will raise questions about which corticosteroid to recommend for asthma exacerbations in adults.

One or two doses of dexamethasone are sometimes used instead of the usual 5 days of prednisone for asthma attacks in KIDS. Now you'll hear that one dose of oral dexamethasone 12 mg might work as well as 5 days of prednisone for mild to moderate asthma exacerbations in ADULTS.

But the new evidence has flaws. It's too soon to know the optimal dose and duration of dexamethasone for asthma exacerbations in adults.

Continue to recommend prednisone 40 to 60 mg/day for about 5 days if an oral steroid is needed for mild to moderate adult asthma exacerbations.

Help ensure asthma patients have an action plan...and meds on hand.

For acute symptoms, tell most patients to start with 2 to 6 puffs of a short-acting beta-agonist (albuterol, etc)...then repeat in 20 minutes.

Advise them to contact their prescriber's office and follow their asthma action plan if symptoms haven't improved after one hour...or for more severe symptoms, such as breathlessness while resting.

Expect most of these patients to start an oral steroid.

Some patients may be told to double or quadruple their inhaled steroid for 1 to 2 weeks...or until they can get an oral steroid. Explain these higher doses can be cumbersome and lead to early refill rejects.

Use our toolbox, *Improving Asthma Care*, to help develop an asthma action plan, optimize controller meds, ensure proper inhaler use, etc.

(For more on this topic, see Clinical Resource #330308 at PharmacistsLetter.com.)

Primary Reference – Rehrer MW, Liu B, Rodriguez M, et al. A randomized controlled noninferiority trial of single dose of oral dexamethasone versus 5 days of oral prednisone in acute adult asthma. *Ann Emerg Med* 2016;68:608-13.

Discussion Questions
Overview of current therapy
1. What is known about managing asthma exacerbations?

See LEADER NOTES for answers to discussion questions

Analysis of new study

2. What type of study was this? How were the patients selected for inclusion?

3. How were the study groups defined?

4. How were the outcomes evaluated?

5. What were the outcomes of this trial?

6. What were the strengths and weaknesses of this study?

7. Were the results expressed in terms we care about and can use?

How should the new findings change current therapy?

8. Do the results change your practice? How?

Apply the new findings to the following case

M.A. is a 28-year-old female who presents to your office to establish care. M.A. reports she is in overall good health, except for a history of asthma. She is currently only using an albuterol inhaler to manage her asthma, and reports needing it at least daily and 1 to 2 times per week during the night. She knows that cigarette smoke and pet hair are triggers for her asthma symptoms. Her 6-year-old son T.A. also has asthma.

9. How can you confirm that M.A.'s symptoms are due to asthma?

You order spirometry and find that M.A.'s FEV₁/FVC ratio is 0.70. Based on M.A.'s symptoms and her reduced FEV₁/FVC, you confirm that M.A. has asthma.

10. What should you consider to optimize M.A.'s asthma treatment?

Since M.A. reported significant asthma symptoms including frequent nighttime awakening due to asthma, you start her on a medium dose inhaled corticosteroid, provide her with an asthma action plan, and advise her to follow up with you in one month.

M.A. misses her 1-month follow-up appointment with you, but has returned because she caught a cold from her son. For the past 3 days she's been using her albuterol inhaler every 4 hours and waking up at least twice each night to use it. She can hear herself wheeze and reports difficulty catching her breath. Her oxygen saturation in your office is 94% on room air with a respiratory rate of 22/min. Her heart rate is 108 and she is speaking in short phrases.

11. How should you treat M.A.'s asthma exacerbation?

M.A. improves with administration of albuterol. You start her on prednisone 40 mg daily for 5 days, giving her first dose in the clinic.

M.A. follows up with you in 3 days and is doing much better. She's continuing her daily prednisone for a total of 5 days and has been able to decrease her short-acting beta-agonist use to twice daily. She agrees to follow up with you in another month to assess her overall asthma control and consider stepping up her medical regimen based on her symptoms and frequency of short-acting beta-agonist use.

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Additional Pharmacist's Letter Resources available at PharmacistsLetter.com

Toolbox, Improving COPD Care. *Pharmacist's Letter/Prescriber's Letter*. January 2017.

PL VOICES, Selecting Appropriate Inhaled Medications for COPD. *Pharmacist's Letter/Prescriber's Letter*. January 2017.

Chart, Inhalers for COPD. *Pharmacist's Letter/Prescriber's Letter*. January 2017.

Chart, Pneumococcal Vaccination in Adults: Who Gets What and When? *Pharmacist's Letter/Prescriber's Letter*. January 2017.

Chart, Correct Use of Inhalers. *Pharmacist's Letter/Prescriber's Letter*. December 2016.

Patient Education Handout, Tips for Correct Use of Inhalers. *Pharmacist's Letter/Prescriber's Letter*. December 2016.

Commentary, Dexamethasone for Childhood Asthma Exacerbations. *Pharmacist's Letter/Prescriber's Letter*. December 2015.

Commentary, Tiotropium (*Spiriva*) for Asthma. *Pharmacist's Letter/Prescriber's Letter*. December 2015.

PL VOICES, Treatment of Community-Acquired Pneumonia. *Pharmacist's Letter/Prescriber's Letter*. June 2015.

Toolbox, Preventing and Treating Community-Acquired Pneumonia. *Pharmacist's Letter/Prescriber's Letter*. May 2015.

Toolbox, Improving Asthma Care. *Pharmacist's Letter/Prescriber's Letter*. December 2014.

PL VOICES, Strategies for Improving Asthma Care. *Pharmacist's Letter/Prescriber's Letter*. December 2014.

Commentary, Psychiatric Adverse Effects of Corticosteroids. *Pharmacist's Letter/Prescriber's Letter*. December 2014.

Toolbox, Using Oral Corticosteroids: a Toolbox. *Pharmacist's Letter/Prescriber's Letter*. July 2013.

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