**Allergic Rhinitis—Facilitator’s Guide**

Gregory Castelli, PharmD, BCPS, BC-ADM; Natasha Harrison, MD

**Learning Objectives**

1. Identify allergic rhinitis definition, risk factors, and associated conditions.

2. Develop non-pharmacologic strategies to deal with allergic rhinitis including allergen avoidance.

3. Choose treatment for allergic rhinitis accounting for patient preference, cost, and side effects.

4. Apply treatment and education strategies to a patient case scenario.

**Key Learning Points**

* Allergic rhinitis is a common condition that has significant impacts on patients’ daily lives and function.
* Allergic rhinitis should be considered when a patient presents with rhinitis symptoms, especially in the context of potential new or seasonal aeroallergen exposure.
* Intranasal corticosteroids and oral antihistamines are the cornerstone of allergic rhinitis treatment. There are several other options available that may also be used.
* Approach should be based on patient’s specific needs. Certain medications have age restrictions while others have concerning side effects that would prohibit their use with other conditions.

**Step-by-step Instructions for Teaching the Curriculum**

1. Please read below instructions.
2. Please open and click through before actual presentation.
3. Organization is important to make sure this Jeopardy-style game is well received. Presenters should provide rules to audience before beginning. These should include how to answer a question, breakdown of teams, and if partial credit will be awarded. Please see below bullets as suggested rules.
	* Two teams should be formed.
	* The presenter should have a scorekeeper.
	* Each team should elect one spokesperson.
	* A coin flip will determine which team goes first.
	* Teams alternate answering one question at a time.
	* If the team does not answer correctly, the other team may steal the question and points.
		+ If the second team does not answer the question correctly, it is a dead question. No points will be assigned, but material should be reviewed.
	* Play continues in this alternating format until every question is chosen.
	* Teams will play final Jeopardy.
		+ Teams will secretly wager portion of all of the points accumulated during the first round.
		+ Teams will receive a patient case and submit an answer.
		+ If they are correct, the team will have the points wagered added to their score.
		+ If incorrect, the team will have the points wagered deducted from their score.
4. This PowerPoint uses links to move throughout the presentation. Please ONLY use your mouse to navigate the presentation.
	* Once a team selects a question, click on the number on the corresponding tile.
	* This will bring you to the proper slide.
	* After a team has answered correctly or if both teams are incorrect, click once to reveal the answer.
	* Click again to get to content slides.
	* The final content slide will have a Home Button in the upper left corner. Click this to go back to the board.
	* Again, please open and navigate the PowerPoint before first presentation.
5. Please see notes under each slide for instructions on teaching the curriculum. The notes for each slide also include content that may be delivered and other active learning strategies.

**Allergic Rhinitis—Quiz with Answers**

Which of the following is a classic symptom of allergic rhinitis?

1. **Post-nasal drip**
2. Epistaxis
3. Anosmia
4. Severe headache

Which of the following is a risk factor for allergic rhinitis?

1. **Family history**
2. Lower socioeconomic class
3. Low IgE levels
4. Negative allergy skin test

What is first line pharmacological treatment for allergic rhinitis?

1. First-generation antihistamines
2. Second-generation antihistamines
3. **Intranasal aorticosteroids**
4. Decongestants

True or **False**:

Inhaled corticosteroids have been shown to affect growth curves in pediatric patients.

Which class of antihistamines is preferred for the treatment of allergic rhinitis?

1. First-generation antihistamines
2. **Second-generation antihistamines**

**Allergic Rhinitis—Final Jeopardy Patient Case: (print several copies per group)**

You will be awarded one point for each correct answer below. The team with the most points (1-5) will be awarded their full wager. If there is a tie, both wagers will be added to the final scores. You may only write down the number of answers necessary for each question. Extra guesses will not be counted, and the first response(s) will be evaluated.

MC is a 5-year-old female who presents to your clinic with her parents for evaluation. She is healthy otherwise and only has a PMH of eczema shortly after birth. She has a few months history of itchy eyes, runny nose, sneezing, and headaches. It is spring although she has never had seasonal allergies. Her family adopted a kitten around the same time of her symptoms that sleeps in MC’s room. Her mom was diagnosed with similar symptoms when she was younger. For her symptoms she has been taking cetirizine 5 mg every evening for 2 months and topical phenylephrine for 1 week.

1. What are two problems with the patient’s current medication list?
	1. **Cetirizine dose should be 2.5 mg daily for her age.**
	2. **She is using phenylephrine for longer than 3 days**
2. What are two risk factors MC has for allergic rhinitis?
	1. **Family history**
	2. **Eczema**
3. What is the BEST treatment (medication or otherwise) for his symptoms?
	1. **Allergy avoidance (remove kitten from bedroom)**

**Learner versions of the pretest and the case are available as separate downloadable files.**

**References**

Agency for Healthcare Research and Quality (AHRQ). Comparative Effectiveness Review on treatments for seasonal allergic rhinitis. AHRQ Comparative Effectiveness Review 2013;July:120.

Lamb CE, Ratner PH, Johnson CE, et al. Economic impact of workplace productivity losses due to allergic rhinitis compared with select medical conditions in the United States from an employer perspective. Curr Med Res Opin 2006 Jun;22(6):1203-10.

Meltzer EO, Bukstein DA. The economic impact of allergic rhinitis and current guidelines for treatment. Ann Allergy Asthma Immunol 2011;106:S12-S16.

PL Detail-Document, Nasal Sprays for Allergic Rhinitis. Pharmacist’s Letter/Prescriber’s Letter. March 2014.

Seidman MD, Gurgel RK, Lin SY, et al. Clinical Practice Guideline: Allergic rhinitis. Otolaryngology-Head and Neck Surgery 2015;152(IS):S1-S43.

Singulair(R) [package insert]. White Station, NJ: Merck & Co, Inc, 2012.

Small P, Kim H. Allergic rhinitis. Allergy Asthma Clin Immunol 2011 Nov 10;7 Suppl 1:S3.

Sur DK, Scandale S. Treatment of allergic rhinitis. Am Fam Physician 2010 Jun 15;81(12):1440-6.

Wallace DV, Dykewicz MS, Bernstein DI, et al. The diagnosis and management of rhinitis: an updated practice parameter. J Allergy Clin Immunol 2008 Aug;122(2 Suppl):S1-84.

Wallace DV, Dykewicz MS, Oppenheimer J, Portnoy JM, Lang DM. Pharmacologic Treatment of Seasonal Allergic Rhinitis: Synopsis of Guidance From the 2017 Joint Task Force on Practice Parameters. Ann Intern Med. 2017 Dec 19;167(12):876-881.

Wells BG, DiPiro JT, Schwinghammer TL, Dipiro CV. Pharmacotherapy handbook, 9th ed. New York: McGraw-Hill Education 2015:813-20.