

On behalf of Vision Expo, we sincerely thank you for being with us this year.

Reminder to Complete Your Session Evaluations!

Please be sure to complete your digital session evaluations for each course you attended! Your feedback is important to us as our Education Planning Committee considers content and speakers for future meetings to provide you with the best education possible.



1

disclosures

last 12 months	last 12 months	last 12 months
allergan/abbvie	sydnexis	aperta biosciences
sun pharma	eyenovia bio	astareal, inc.
tarsus pharma	laboratoires Thea	azura ophthalmics
Ocuphire	visus/tenpoint	aldehyra therapeutics
Bruder	therapeutics	Vyluma
Scope	Harrow	Lenz

All relevant relationships have been mitigated.

2

OTC Treatments for Allergic Conjunctivitis: What Every Optometrist Needs to Know

milton m. hom
eyemage@mmineternet.com
Azusa, CA

200

3

OTC Treatments for Allergic Conjunctivitis: What Every Optometrist Needs to Know

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4

OTC Treatments for Allergic Conjunctivitis: What Every Optometrist Needs to Know

One airway philosophy

Cases

Antihistamines, Asthma, Allergic conjunctivitis

Rhinitis, Cough, Hives

5

Truth or Tale?

Allergic conjunctivitis is an eye disease

6

It's not just the eye— it's the body.

allergic conjunctivitis = systemic disease

7

One airway
One disease

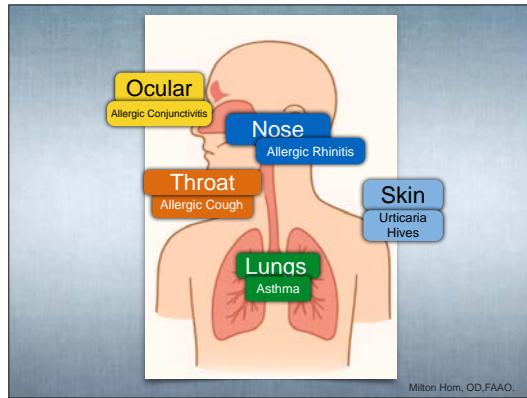
Grossman J. One airway, one disease. Chest. 1997 Feb;111(2 Suppl):118-168. doi: 10.1378/chest.111.2_supplement.11s. PMID: 9042022.

8

One airway philosophy: "The upper and lower airways are a single organ that work together"

Grossman J. One airway, one disease. Chest. 1997 Feb;111(2 Suppl):118-168. doi: 10.1378/chest.111.2_supplement.11s. PMID: 9042022

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How well do patients choose the right OTC product?

A: About 75% pick correctly
B: About 50% pick correctly
C: About 25% pick correctly
D: Less than 15% pick correctly

11

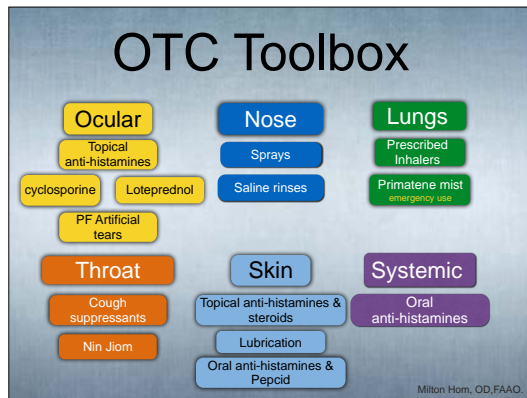
How well do patients choose the right OTC product?

A: About 75% pick correctly
B: About 50% pick correctly
C: About 25% pick correctly
D: Less than 15% pick correctly

•Correct: D. Less than 15%
63.7M OTC allergy products sold (2020–2023)
Most adults struggle with OTC selection
Only ~12% show proficient health literacy.

•Coughlin SS, et al. Health Literacy, Social Determinants of Health, and Disease Prevention and Control. PMC, 2020.
•U.S. HHS. National Assessment of Adult Literacy (NAAL).
•Stone KL, et al. A Pilot Study of Decision Factors Influencing OTC Medication Selection and Use by Older Adults. PMC, 2020.
•Dudzinski et al. Use of over-the-counter antiallergic products – analysis. PMC, 2025.

12



13



14

Case: The Sniffling Accountant

15

Case Summary

- Jason, 39-year-old CPA with persistent nasal congestion.
 - Symptoms: "Can't breathe through my nose at night—wakes me up." Morning stuffiness, post-nasal drip
- Current OTC: Loratadine daily
 - Triggers: Office pollen, scented candles (VOCs), window open at night

16

Case Summary

- Jason, 39-year-old CPA with **persistent nasal congestion**.
 - Symptoms: "Can't breathe through my nose at night—wakes me up." Morning stuffiness, post-nasal drip
- Current OTC: Loratadine daily
 - Triggers: Office pollen, scented candles (VOCs), window open at night

17

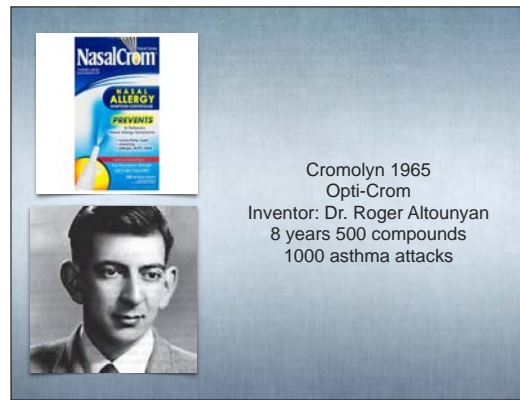
Allergic rhinitis

18



Sprays

19



Cromolyn 1965
Opti-Crom
Inventor: Dr. Roger Altounyan
8 years 500 compounds
1000 asthma attacks

20

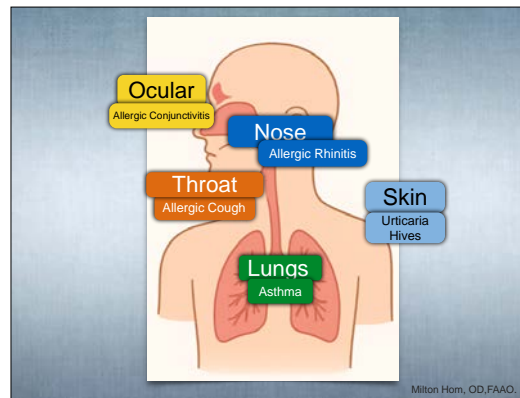


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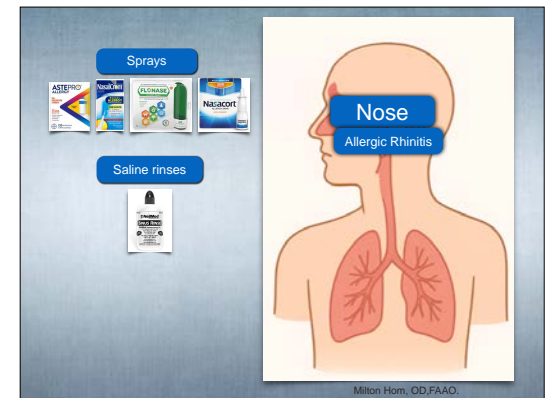
“[Flonase] provides safe and effective relief of ocular symptoms associated with SAR [Seasonal Allergic Rhinitis]”

DeWester J, Philpot EE, Westlund RE, Cook CK, Rickard KA. The efficacy of intranasal fluticasone propionate in the relief of ocular symptoms associated with seasonal allergic rhinitis. Allergy Asthma Proc. 2003 Sep-Oct;24(5):331-7. PMID: 14619333.
Baroody FM, Shenaq D, DeTino M, Wang J, Naclerio RM. Fluticasone furoate nasal spray reduces the nasal-ocular reflex: a mechanism for the efficacy of topical steroids in controlling allergic eye symptoms. J Allergy Clin Immunol. 2009 Jun;123(6):1342-8. doi: 10.1016/j.jaci.2009.03.015. Epub 2009 May 9. PMID: 19428097.

22



23



24



Treatment

25



Navage

26

Truth or Tale?

Use a nasal rinse daily

27

Neti-pot

62% lower incidence of sinusitis after stopping Neti-pots

Use nasal irrigation no more than 1-3 weeks

Nsouli TM, Schluockebier CD, McSorley Gerard EJ, et al. Long term use of nasal saline irrigation: harmful or helpful? Ann Allergy Asthma Immunol 103(suppl 3):A3-A146, 2009. (Abstracts of the 2009 annual meeting of the American College of Allergy, Asthma, and Immunology, Miami, FL, November 5-10, 2009.)

<http://www.webmd.com/allergies/guide/neti-pot-nasal-irrigation-pros-and-cons?page=2>

28

Neti-pot

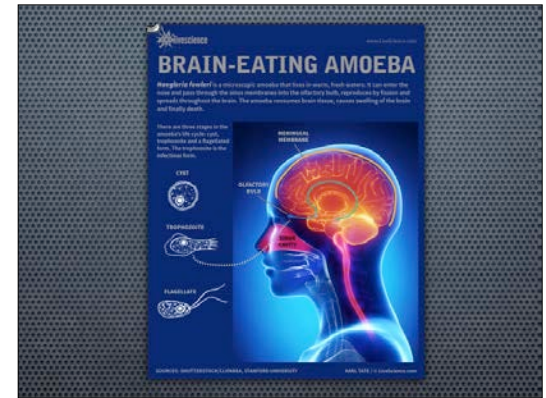
"The nasal mucus...contains very important immune elements that are the first line of respiratory defense against infections"

Talal Nsouli, MD

Nsouli TM, Schluockebier CD, McSorley Gerard EJ, et al. Long term use of nasal saline irrigation: harmful or helpful? Ann Allergy Asthma Immunol 103(suppl 3):A3-A146, 2009. (Abstracts of the 2009 annual meeting of the American College of Allergy, Asthma, and Immunology, Miami, FL, November 5-10, 2009.)

<http://www.webmd.com/allergies/guide/neti-pot-nasal-irrigation-pros-and-cons?page=2>

29



30

What is your first choice OTC oral anti-histamine?

A. Claritin
B. Allegra
C. Zyrtec
D. Xyzal
E. Benadryl

31

Case Summary

- Jason, 39-year-old CPA with persistent nasal congestion.
 - Symptoms: "Can't breathe through my nose at night—wakes me up." Morning stuffiness, post-nasal drip
- Current OTC: **Loratadine daily**
 - Triggers: Office pollen, scented candles, window open at night

32

Anti-histamines

33

Not all antihistamines are created equal. Choose wisely.

34

Drowsiness ranking: The trade-off between efficacy and sedation

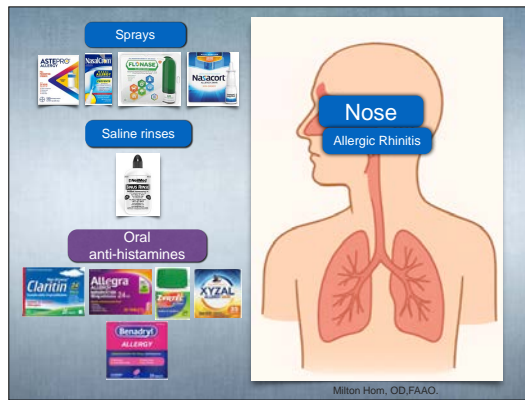
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Anti-histamines

Most effective Least effective

Most drowsiness Least drowsiness

36



37

What?
Nasal congestion

So what?
Using Claritin

Now what?
Add AstePro
Add Sinus rinse
Switch to Zyrtec/Xyzal

38

Case: Trick or Trigger: Allergy in Fall

39

Case Summary

- James, 29-year-old software developer
- Complaints: Sneezing, congestion, post-nasal drip (Oct)
- Reports chest tightness at night (mild asthma history)
- Current meds: Loratadine
- No ocular complaints
- Lives near fields, ragweed exposure

40

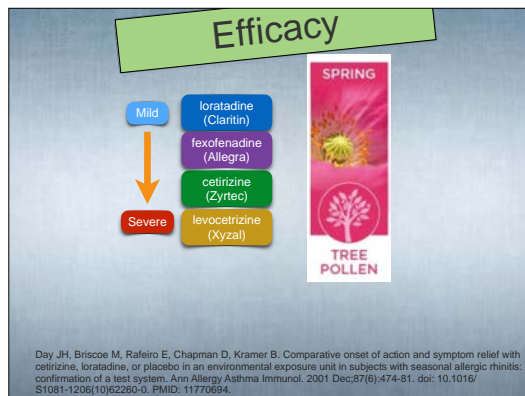
Case Summary

- James, 29-year-old software developer
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41



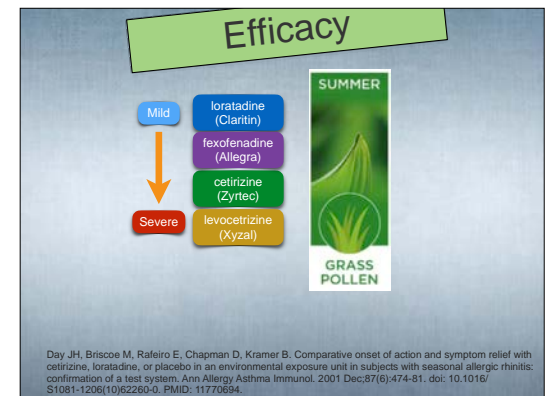
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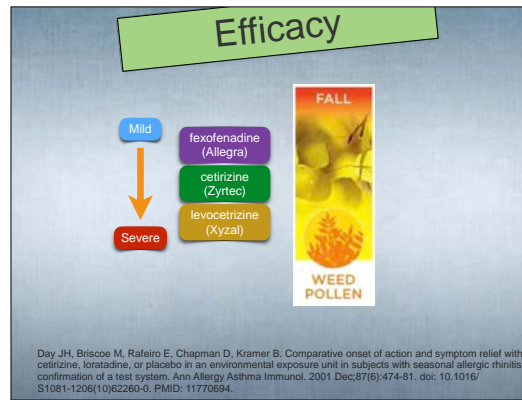
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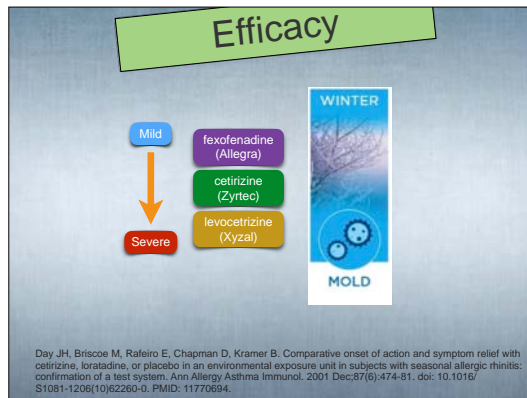
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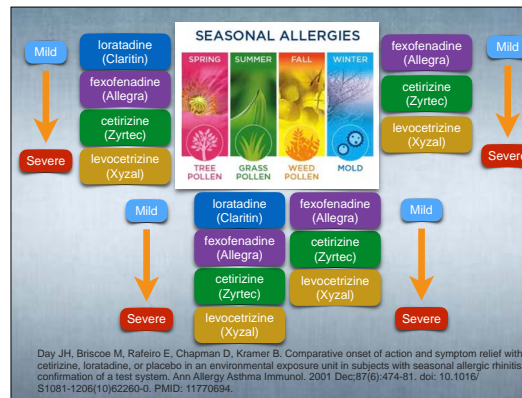
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48



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50

Rotate anti-histamines

“Loratadine (Claritin) weak against ragweed and mold”

Rotate to a different antihistamine (especially Fall and Winter if using (Claritin) loratadine)

Day, James H. et al. Cetirizine, loratadine, or placebo in subjects with seasonal allergic rhinitis: Effects after controlled ragweed pollen challenge in an environmental exposure unit. Journal of Allergy and Clinical Immunology, Volume 101, Issue 5, 638 – 645
McGill A. The Best Antihistamines for Mold Allergies: Allegra vs Zyrtec vs Claritin vs Xyzal vs Benadryl

51

Case Summary

- James, 29-year-old software developer
- Complaints: Sneezing, congestion, post-nasal drip (Sept Oct)
- Reports chest tightness at night (mild asthma history)
- Current meds: Loratadine
- No ocular complaints
- Lives near fields, ragweed exposure

52

Asthma

53

Primatene mist

Primatene mist
0.125mg per spray
inhalation epinephrine

Domingo C, Singh D. The Changing Asthma Management Landscape and Need for Appropriate SABA Prescription. Adv Ther. 2023 Apr;40(4):1301-1316. doi: 10.1007/s12325-022-02410-z. Epub 2023 Jan 30. PMID: 36715896; PMCID: PMC10070225.

54

Primatene mist

"Primatene Mist...will offer suboptimal care for the treatment of asthma...none of the expert guidelines recommend the use...[of] Primatene Mist...to treat asthma"

"[NIH] recommends against the use...[it] has the potential for 'excessive cardiac stimulation.'"

American Lung Association

<https://www.lung.org/media/press-releases/fda-approval-primatene#:~:text=CHICAGO,IL|November 9,does not prevent asthma episodes.>

55

Primatene mist

"We know that the No. 1 reason 10 people die from asthma daily is due to lack of control and overuse of quick-relief medication"

-Tonya Winders, President & CEO at Allergy & Asthma Network

<https://www.jaxallergy.com/primatene-mist-otc-caution/>

56

Primatene mist

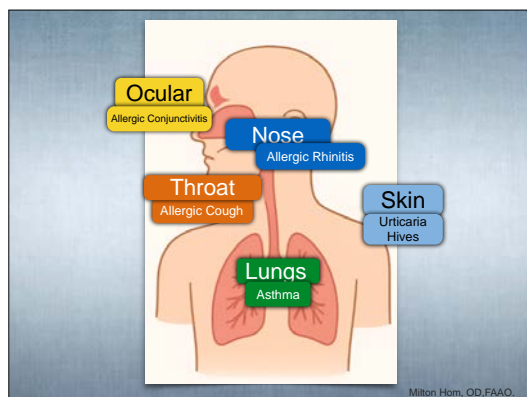
"Asthma is not a 'do-it-yourself' disease that you can treat yourself with OTC medication."

-Bradley Chipps, MD, ACAAI President

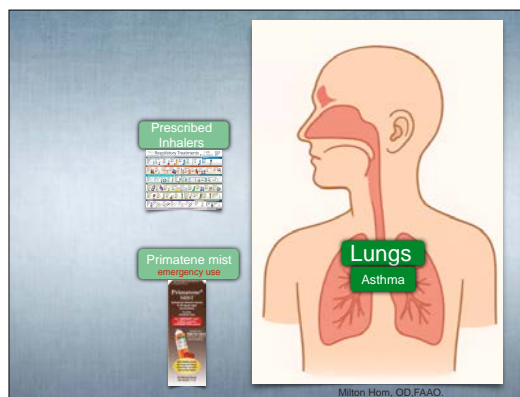
<https://www.jaxallergy.com/primatene-mist-otc-caution/>

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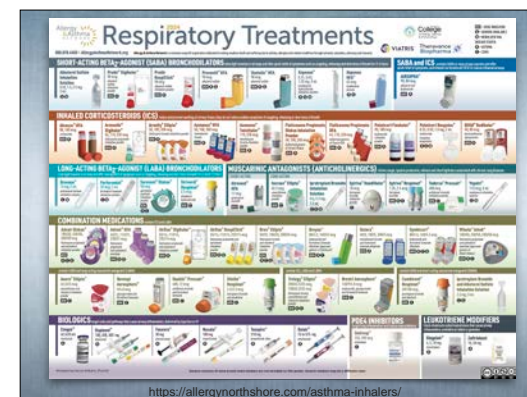
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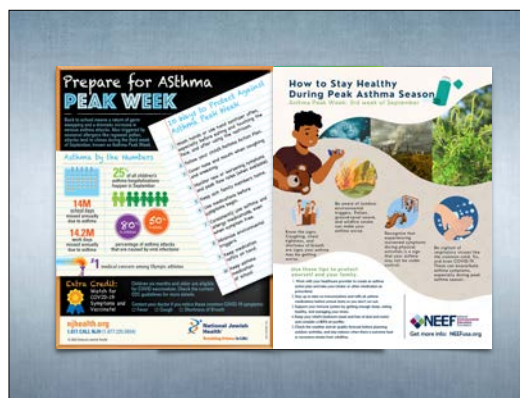


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Have you heard of Asthma Peak Week?



61



62

Asthma

Asthma Peak Week:
3rd week of September
25% of all asthma hospitalizations
Ragweed highest levels
Flu season starts
Seasonal weather change
Back to school
Mold
School stress

63

Pollmageddon

Asthma Peak Week =Allergy Peak Week

“Start taking med[s] around St. Patrick’s Day”
“Now start around Valentine’s Day”

Stanley Fineman, MD
Allergist, Atlanta

64

What?

Congestion and chest tightness in the Fall

So what?

Using Claritin

Now what?

Switch to Allegra/Zyrtec/Xyzal
Refer for asthma

65

Case: Feline Fine Until the Swelling Starts

Case Summary

- Patient: Angela, 37-year-old yoga instructor
- Eyelid swelling and red eyes after visiting a friend with cats
- Hives on arms and torso
- Reports mild tearing, no discharge
- Using Allegra PRN, feels it’s not working
- Symptoms start ~6 hours post-exposure, last 1–2 days
- No asthma or systemic symptoms

67

Case Summary

- Patient: Angela, 37-year-old yoga instructor
- Eyelid swelling and red eyes after visiting a friend with cats
- Hives on arms and torso
- Reports mild tearing, no discharge
- Using Allegra PRN, feels it’s not working
- Symptoms start ~6 hours post-exposure, last 1–2 days
- No asthma or systemic symptoms

68

“The presenting signs and symptoms include itching (a hallmark sign of ocular allergy)”

“Itching remains the hallmark sign”

It’s not all about itch

Biology, Leonard, Milton M. Horn, and Andrew Nguyen. “Total ocular symptom score (TOSS) and dry eyes.” *Journal of Allergy and Clinical Immunology* 131.2 (2013): AB189.
Baab S, Le PH, Gurnani B, et al. Allergic Conjunctivitis. [Updated 2024 Jan 26]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK448118/>
Tariq F. Allergic Conjunctivitis: Review of Current Types, Treatments, and Trends. *Life (Basel)*. 2024 May 21;14(6):650. doi: 10.3390/life14060650. PMID: 38929634; PMCID: PMC11254416.
EMJ. 2018;3(1):76-83. DOI/10.33590/emj/10312711. <https://doi.org/10.33590/emj/10312711>

69

It’s not all about itch

Total Ocular Symptom Score (TOSS)						
Have you experienced any of the following during the last week?	All of the Time (4)	Most of the Time (3)	Half of the Time (2)	Some of the Time (1)	None of the Time (0)	N/A
18. Itchy?						
19. Red?						
20. Tearing (eyes watering)?						
21. Swelling (puffy eyes)?						

Biology, Leonard, Milton M. Horn, and Andrew Nguyen. “Total ocular symptom score (TOSS) and dry eyes.” *Journal of Allergy and Clinical Immunology* 131.2 (2013): AB189.
Baab S, Le PH, Gurnani B, et al. Allergic Conjunctivitis. [Updated 2024 Jan 26]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK448118/>
Tariq F. Allergic Conjunctivitis: Review of Current Types, Treatments, and Trends. *Life (Basel)*. 2024 May 21;14(6):650. doi: 10.3390/life14060650. PMID: 38929634; PMCID: PMC11204416.
EMJ. 2018;3(1):76-83. DOI/10.33590/emj/10312711. <https://doi.org/10.33590/emj/10312711>

70

Topical anti-histamines



Villareal AL, Farley W, Pflugfelder SC. Effect of topical ophthalmic epinastine and olopatadine on tear volume in mice. *Eye Contact Lens*. 2006 Dec;32(6):272-6. doi: 10.1097/D1.icl.0000224360.10319.b1. PMID: 17099387.

71

72

“After 2 days of treatment, epinastine-treated mice showed greater mean tear volumes than olopatadine-treated mice”

Villareal AL, Farley W, Pflugfelder SC. Effect of topical ophthalmic epinastine and olopatadine on tear volume in mice. Eye Contact Lens. 2006 Dec;32(6):272-6. doi: 10.1097/01.icl.0000224360.10319.b1. PMID: 17099387.

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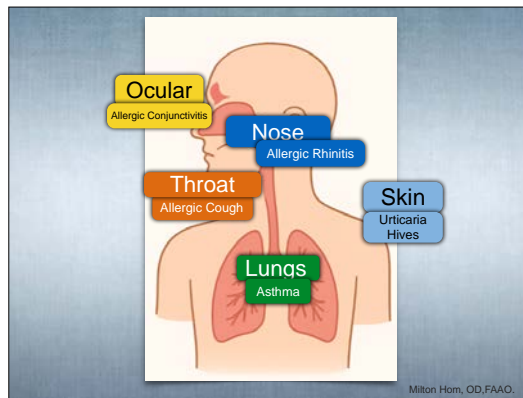
Wade L, Bielory L, Rudner S. Ophthalmic antihistamines and H1-H4 receptors. Curr Opin Allergy Clin Immunol. 2012 Oct;12(5):510-6. doi: 10.1097/ACI.0b013e328357d3ba. PMID: 22918191.

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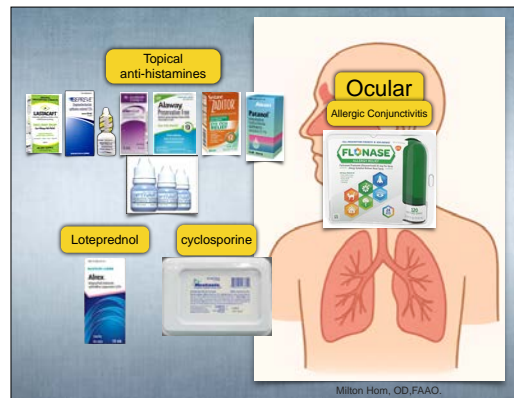
Wade L, Bielory L, Rudner S. Ophthalmic antihistamines and H1-H4 receptors. Curr Opin Allergy Clin Immunol. 2012 Oct;12(5):510-6. doi: 10.1097/ACI.0b013e328357d3ba. PMID: 22918191.

75



Milton Horn, OD,FAAO.

76



Milton Horn, OD,FAAO.

77

Case Summary

- Patient: Angela, 37-year-old yoga instructor
- Eyelid swelling and red eyes after visiting a friend with cats
- Hives on arms and torso
- Reports mild tearing, no discharge
- Using Allergra PRN, feels it's not working
- Symptoms start ~6 hours post-exposure, last 1–2 days
- No asthma or systemic symptoms

78

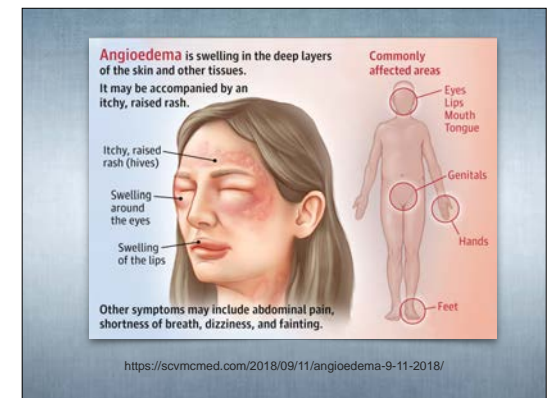
Urticaria Hives Rash

79



<https://www.verywellhealth.com/rash-around-eyes-8622562>

80



<https://scvmcmed.com/2018/09/11/angioedema-9-11-2018/>

81

H1 histamine receptor

H2 histamine receptor

"Fifteen percent of the population has H2 receptors"

Fedorowicz Z, van Zuren EJ, Hu N. Histamine H2-receptor antagonists for urticaria. Cochrane Database Syst Rev. 2012 Mar 14;2012(3):CD008596. doi: 10.1002/14651858.CD008596.pub2. PMID: 22419335; PMCID: PMC27390502.

82

Treatment

1. Start with 2G Anti-histamine 2x day
2. Can increase to 4x day (2tabs 2xday)
3. Add famotidine 2x day
4. Refer

Oral anti-histamines

Kocaturk E, Chu DK, Turk M, Ruckmann H, Van Doorn M, Nochalwong S, Zuberbier T. Management of Chronic Spontaneous Urticaria: Made Practical: What Every Clinician Should Know. J Allergy Clin Immunol Pract. 2025 Sep;13(9):2252-2269. doi: 10.1016/j.jaip.2025.07.021. Epub 2025 Jul 21. PMID: 40815254.

83

84

Treatment

1. Avoidance
2. Lubricate
3. Oral anti-histamines
4. Refer Red flags (breathing problems, etc)

85

Lubricate

Dryness triggers

Pramoxine

<https://www.youtube.com/watch?v=0P2bFVGRre>

86

Milton Hom, OD,FAAO.

87

Avoidance

Lubrication

Oral anti-histamines

Oral anti-histamines + Pepcid

Milton Hom, OD,FAAO.

88

Case Summary

- Patient: Angela, 37-year-old yoga instructor
- Eyelid swelling and itchy eyes **after visiting a friend with cats**
- Hives on arms and torso
- Reports mild tearing and conjunctival itch, no discharge
- Using Allegra PRN, feels it's not working
- Symptoms **start ~6 hours post-exposure, last 1-2 days**
- No asthma or systemic symptoms

89

Do you love cats?

A. Yes

B. No

C. Prefer not to say

90

Cat allergies

Fel d-I glycoprotein:
 Secreted by sebaceous glands
 Found in fur, urine, saliva
 Can remain airborne for months
 10x smaller than pollen

91

Cat allergies

amazon
 \$22.99



92

Cat allergies

Washing/baths only effective for 3 hours
 Males neutered much lower (5.46 to 1.28)
 HEPA vacuum + HEPA room filtration works, each alone has diminished effect

93

Hypoallergenic cats

Breed	Fel d 1	Coat	Notes
Siberian	Lower	Long	Very low Fel d 1
Balinese	Lower	Long	"Hypoallergenic" Siamese
Oriental Shorthair	Lower	Short	Related to Siamese
Russian Blue	Lower	Short	Anecdotal
Devon Rex	Possibly Low	Very Short	Minimal grooming
Cornish Rex	Possibly Low	Down Coat (soft)	Similar to Devon Rex

Beheshti R, Huang P, Le M, Peterson R, Tversky JR. Should the Cat Stay Home? A Guide to Managing Cat Allergies. Allergies. 2025; 5(2):12.

94

Hypoallergenic cats

"Fabrics with an average pore size of 6 μm or less blocked cat allergen (Fel d 1)"

Vaughan JW, McLaughlin TE, Perzanowski MS, Platts-Mills TA. Evaluation of materials used for bedding encasement: effect of pore size in blocking cat and dust mite allergen. J Allergy Clin Immunol. 1999 Feb;103(2 Pt 1):227-31. doi: 10.1016/s0091-6749(99)70495-1. PMID: 9949312.

95

Hypoallergenic casings

Type	Pore size	Where to Buy
National Allergy	2.6 microns	Amazon
Mission:Allergy	2 microns	Amazon "Dust Mite and Allergen Proof"

Vaughan JW, McLaughlin TE, Perzanowski MS, Platts-Mills TA. Evaluation of materials used for bedding encasement: effect of pore size in blocking cat and dust mite allergen. J Allergy Clin Immunol. 1999 Feb;103(2 Pt 1):227-31. doi: 10.1016/s0091-6749(99)70495-1. PMID: 9949312.

96

Cat allergies

Cat food?

"Feeding a diet with anti Fel d1 IgY [anti Fel d1 antibodies] significantly reduced the active Fel d1 on the hair of cats."

Satyaraj, Ebenezer, et al. "Reduction of active Fel d1 from cats using an antiFel d1 egg IgY antibody." Immunity, inflammation and disease 7.2 (2019): 68-73.

97

Cat allergies



Winner Cat Care Category. Survey of 40,000 people by Kantar.

98

What?

Red and puffy eyes and hives around cats

So what?

Using Allegra

Now what?

Prescribe Elestat/Bepreve/Lastacraft (not about itch)
 Increase Allegra 2x or 4x day
 Add Pepcid
 Use Flonase if rhinitis
 Refer

99

Case: The Fall Hack Attack

100

Case Summary

- Patient: Darius, 33-year-old warehouse manager
- Dry, hacking cough—worse at night
- No fever, chills, or mucus
- Mild runny nose and throat clearing
- No ocular signs or asthma
- Positive allergy history: dust mites, ragweed, cats
- Poor response to OTC cough suppressants

101

Case Summary

- Patient: Darius, 33-year-old warehouse manager
- **Dry, hacking cough—worse at night**
- **No fever, chills, or mucus**
- **Mild runny nose and throat clearing**
- No ocular signs or asthma
- Positive allergy history: dust mites, ragweed, cats
- **Poor response to OTC cough suppressants**

102

Allergic cough

103

Cough

“with cough, it's an airway itch”

Gibson PG. Cough is an airway itch? Am J Respir Crit Care Med. 2004 Jan 1;169(1):1-2. doi: 10.1164/rccm.2310009. PMID: 14695099.

104

Which statement is true about OTC cough suppressants?

- A: They are highly effective for acute cough
- B: Codeine is safe in children
- C: Most OTC cough meds don't work
- D: They cure the underlying cause

105

Which statement is true about OTC cough suppressants?

- A: They are highly effective for acute cough
- B: Codeine is safe in children
- C: Most OTC cough meds don't work
- D: They cure the underlying cause

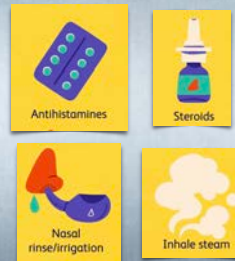


Correct: C—Most OTC cough suppressants don't work.
Post-nasal drip from allergic rhinitis is the most common cause of chronic cough overall

Smith SM, Schroeder K, Fahey T. Over-the-counter (OTC) medications for acute cough in children and adults in community settings. Cochrane Database Syst Rev. 2014;(11):CD001831.
— No good evidence that OTC suppressants work better than placebo.
American Academy of Pediatrics. Policy Statement: Use of Cough and Cold Medicines in Children. Pediatrics. 2008.
Morice AH, et al. ERS guidelines on chronic cough. Eur Respir J. 2020;55(1):1901136.

106

Allergic cough



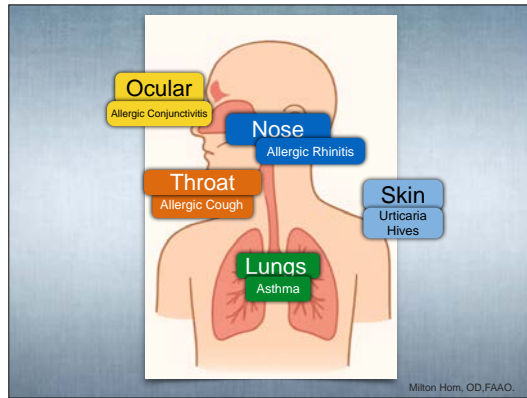
107

Nin Jiom

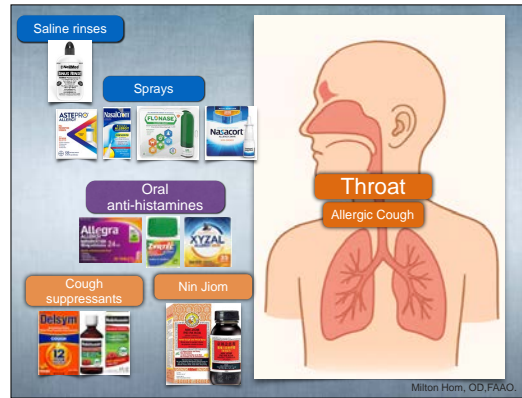


<https://www.amazon.com/NIN-JIOM-NATURAL-Soothing-Respiratory/dp/B001A5Z780>

108



109



110

What?

Cough and runny nose

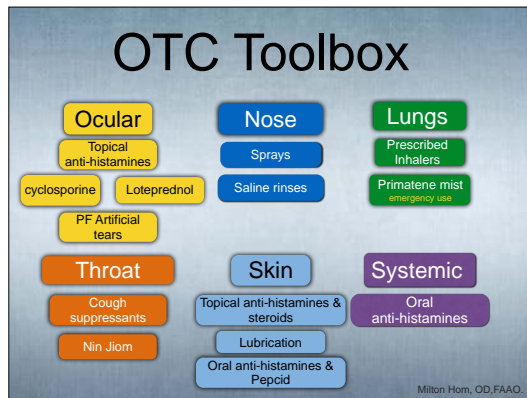
So what?

Cough suppressants don't work well

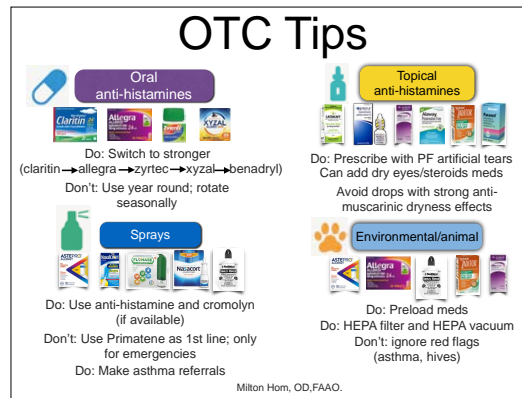
Now what?

Saline rinses, nasal sprays,
oral anti-histamines, Nin Jiom
Consider asthma

111



112



113



114

thank you!

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115