OTC MEDICATIONS AND THE RED FLAGS

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Objectives

1. Discuss the importance of OTC counseling
2. Review OTC categories and medication basics
3. Discover potential red flags indicating the need for pharmacist intervention
Assessment Questions

1. What percent of patients would rather try an OTC medication before seeking professional care?
   a. 52%
   b. 66%
   c. 84%
   d. 93%

2. Which of the following medications may cause children to feel energetic?
   a. Robitussin (guaifenesin)
   b. Benadryl (diphenhydramine)
   c. Afrin (oxymetazoline)
   d. Zytrec (cetirizine)

3. Which of the following fever scenarios indicate the need for pharmacist intervention?
   a. Temperature: 100°F, Duration: 4 days
   b. Temperature: 101°F, Duration: 3 days
   c. Temperature: 103°F, Duration: 2 days
   d. Temperature: 103°F, Duration: 3 days
The Impact of OTC medications

• Each dollar spent on OTC medicines saves $6-7 for the U.S. healthcare system

• If OTC medicines did not exist, an additional 56,000 medical practitioners would need to work full-time to accommodate the increase in office visits by consumers seeking prescriptions for self-treatable conditions.

• If OTC medicines were not available, additional Emergency Department visits, primarily by patients on Medicaid and uninsured individuals, will drive up nearly $4 billion in healthcare system costs each year.

• 93% of patients would rather try an OTC medication before seeking professional care
The Importance of OTC counseling

- Only about 1 in 3 patients will ask the pharmacist a question before selecting an OTC medication
- OTC counseling is vital to ensure
  - An OTC medication selected is safe to use
  - There are no drug-drug or drug-disease interactions
  - A safe product and dosing regimen is used
  - The selected product is used correctly and for the correct duration
  - The patient knows what to expect from the medication
  - The patient knows when to stop taking the medication and go to the doctor
Role of the Technician

• You are the ultimate protector of our patients!
  • You are the front line of the pharmacy
  • Help check patients out at the cash register
  • May be the only employee the patient talks to

• So what can you do?
  • Keep a lookout for OTC red flags
  • Grab a pharmacist if a patient looks lost or overwhelmed in the OTC aisle
  • Make patients feel comfortable in the pharmacy
OTC Categories

- Pain and fever
- Cold, cough, allergy
- Constipation
- Diarrhea
- Nausea and vomiting
- Vaginal infections
- Tobacco cessation
Pain and Fever

• Fever: acetaminophen, ibuprofen, aspirin

• Headache
  • Tension headache: acetaminophen, ibuprofen
  • Migraine: ibuprofen, acetaminophen, aspirin

• Arthritis
  • Rheumatoid: ibuprofen, naproxen, aspirin
  • Osteoarthritis: ibuprofen, acetaminophen, aspirin

• Dysmenorrhea: ibuprofen, acetaminophen, aspirin
General Red flags

- Acetaminophen
  - 3,000mg/day max dose
  - Liver disease
    - History of alcoholism

- NSAIDs
  - Ibuprofen: 1200mg/day max dose
  - Naproxen: 600mg/day max dose
  - Aspirin: 4,000mg/day max dose
  - Renal disease
  - History of ulcers
  - History of cardiovascular disease
  - Uncontrolled high blood pressure
  - Pregnancy
  - Chronic use in the elderly
  - Use while taking anticoagulant or antiplatelet agents
Pain and Fever: Red Flags

- Pain
  - Duration of 2 weeks or more without treatment
  - 10 days after treatment
  - Increased pain or change in pain
  - Visible or suspected fracture, fever, vomiting
  - 7 years old or younger

- Fever
  - Fever for more than 3 days
  - Patients 6 months or older with rectal temperature 104°F or greater
  - Infants 6 months or younger with rectal temperature 101°F or greater
  - Symptoms of infection
  - Impaired immune function: Cancer, HIV, etc.
  - Child that will not drink anything or is very sleepy or hard to wake
Pain and Fever: Red Flags

- **Headache**
  - Duration of 10 days with or without treatment
  - 8 years of age or younger
  - Headache due to secondary cause: sinusitis, head trauma, etc.
  - Undiagnosed migraine

- **Arthritis**
  - Undiagnosed rheumatoid arthritis

- **Dysmenorrhea**
  - Severe dysmenorrhea
  - Menorrhagia
  - History of vaginal disorders
Cold and Cough

- Decongestants
  - Oral: pseudoephedrine (Sudafed), phenylephrine (Sudafed PE)
  - Nasal: phenylephrine (Neo-Synephrine), oxymetazoline (Afrin)

- Topical anesthetic
  - Benzocaine (Cepacol), phenol (Chloraseptic spray), dyclonine HCl (Sucrets)
  - Menthol: cough drops

- Antitussives/expectorant
  - Antitussive: dextromethorphan
  - Expectorant: guaifenesin
Cold and Cough Red Flags

• Cold
  • Fever over 101.5°F
  • Chest pain
  • Shortness of breath
  • Impaired immune system
  • Children under 4

• Cough
  • Green or thick yellow sputum
  • Blood in sputum
  • Fever
  • Symptoms of undiagnosed respiratory disorder
  • Worsening cough after first treatment attempt
  • Children under 4
Cold and Cough Red Flags

• Decongestants
  • Afrin use for longer than 3-5 days
  • Uncontrolled high blood pressure
  • Hyperthyroidism
  • Narrow angled glaucoma
  • BPH

• Topical anesthetic and antitussive/expectorant
  • Diabetes
Allergy

- Antihistamines
  - First generation: diphenhydramine (Benadryl)
  - Second generation: loratadine (Claritin), cetirizine (Zyrtec), fexofenadine (Allergra)

- Decongestants
  - Sometimes combined with antihistamines
    - Claritin-D, Zyrtec-D, Allegra-D

- Cromolyn (Nasalcrom)
  - 2-4 weeks before maximum benefit
Allergy Red Flags

• Allergy
  • Otitis media
  • Sinusitis
  • Symptoms of undiagnosed respiratory disorder
  • Unresponsive to treatment attempts
  • Children under 12

• Benadryl
  • Caution in elderly
  • History of alcoholism
  • Use with caution due to drowsiness
    • May make children energetic
Constipation

• Bulk forming laxatives
  • Methylcellulose (Citrucel), carboxymethylcellulose
  • Most natural treatment
  • Onset: 12-24 hours
  • Contraindicated: opioid induced constipation
  • Caution with children

• Emollients (stool softeners)
  • Docusate
  • Often combined with stimulant
  • Onset: 1-2 days

• Lubricants
  • Mineral oil
  • Onset: 6-8 hours
    • Rectal administration: 5-10 minutes
Constipation

- Osmotic (saline laxatives)
  - Magnesium citrate, magnesium hydroxide (MOM), magnesium sulfate
  - Onset: 30 minutes-3 hours
    - Rectal administration: 2-5 minutes

- Hyperosmotic
  - Polyethylene glycol 3350, lactulose (Rx), GoLytely (Rx)
  - Onset: 1-3 days
    - Rectal administration: 30 minutes or less
  - Should not be used in patients less than 17 years old

- Stimulants
  - Senna, Bisacodyl
  - Onset: 6-12 hours
Constipation Red Flags

- Blood in stool
- Less than 2 years old
- Abdominal pain
- Fever
- Nausea and vomiting
- Chronic GI condition
  - Paraplegia
  - Irritable bowel disease
  - Colostomy
- Daily laxative use
- Duration of 2 weeks or greater or recur over 3 months
Diarrhea

- Loperamide (Imodium)
  - Do not use for food poisoning
  - Do not use for *C. difficile*

- Bismuth Subsalicylate (Pepto-Bismol)
  - Stains stool and tongue black
  - Do not use in children under 12
    - Children’s Pepto-Bismol is calcium carbonate

- Digestive enzymes (Lactaid)
  - Prophylactic treatment
Diarrhea Red Flags

- Less than 6 months old
- Older than 6 months old with persistent high fever (102.2°F)
- Severe dehydration
- Abdominal pain
- Prolonged vomiting
- Pregnancy
- Chronic or persistent diarrhea
- Blood, mucus, or pus in the stool
Nausea and Vomiting

• Motion sickness
  • Meclizine (Bonine, Dramamine Less Drowsy)
  • Cyclizine (Marazine)
  • Dimenhydrinate (Dramamine Chewable)
  • Diphenhydramine

• Pregnancy
  • No approved OTC antiemetic
  • Try nonpharmacological options first

• Food poisoning
  • No OTC antiemetic
    • antidiarrheal?
Nausea and Vomiting Red Flags

- Signs of dehydration
- Suspected food poisoning for more than 24 hours
- Severe abdominal pain
- Nausea and vomiting with fever with or without diarrhea
- Blood in vomit
- Yellow skin or eyes
- Head injury
- Drug-induced:
  - Medication dose may be toxic: digoxin, theophylline, lithium
  - Chemotherapy, radiation, etc.
- Pregnancy and breast feeding
Vaginal Infections

- **Antifungals: Imidazole**
  - Clotrimazole (3-day vaginal cream), butoconazole (Mycelex-3), tioconazole (Vagistat), miconazole (Monistat)

- **Symptom treatment**
  - Local anesthetic: Vagisil
  - Analgesic: phenazopyridine (Azo)

- **Prophylactic treatment**
  - Azo cranberry
Vaginal Infections Red Flags

- **Bacterial Vaginosis**
  - Vaginal discharge “fishy odor”
  - 33% of vaginal infections
  - **Must see doctor**

- **Trichomoniasis**
  - Yellow-gray or green discharge
  - Caused by protozoa
  - Transmitted by sexual activity
  - 15-20% of vaginal infections
  - **Must see doctor**
Vaginal Infections Red Flags

- Vulvovaginal Candidiasis (Yeast infection)
  - Cottage cheese-like discharge
  - Intense pruritus
  - Uncomplicated cases: OTC is OK
- Except:
  - Pregnancy
  - Girls under 12 years old
  - Fever
  - Recurrent infection
    - 3 or more infections/year
    - More than 1 infection in the past 2 months
Tobacco Cessation

- **Gum**
  - Should be chewed and “parked”
  - Dose: 1 piece every 1-2 hours while awake for the first 6 weeks (8-16 pieces of gum/day)
    - Taper until no nicotine replacement therapy is needed
  - Watch for:
    - Mouth ulcers
    - Upset stomach
    - Heartburn
    - Sore throat

- **Lozenges**
  - Same dosing as gum
  - Delivers more nicotine than gum
  - Do not bite or chew

- **Patch**
  - Watch for vivid dreams
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Questions? Comments? Concerns?

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