**Rosacea: Understanding the Patient Journey, Offering Insightful Help**

Pharmacist Posttest

**1. A 42-year-old patient asks to speak to the pharmacist and says that she has recently been diagnosed with rosacea. You ask her what kind of rosacea she has, and flushes as she answers and she says she can't remember. As you observe her skin, you see that she's got visible blood vessels on the skin surface and she also has central redness and areas of breakout that resembles acne. What kind of rosacea does she appear to have?**

A. ETR

B. PPR

C. ETR and PPR

D. Phymatous rosacea

**2. A woman who indicated she is menopausal asks you about symptoms of redness, swelling, and breakouts on her cheeks and nose. She indicates that she had noticed acne -like lesions starting to develop in her early 40s, and since menopause has started, they have worsened considerably. Which of the following types of rosacea is she most likely to have?**

A. ETR

B. PPR

C. ETR and PPR

D. Phymatous rosacea

**3. Which of the following is a key underlying pathology for rosacea?**

A. Elevated levels of interleukins

B. Alcohol abuse

C. Inflammation and inflammatory changes

D. Psychiatric illness

**4. Which of the following statements is true concerning *Demodex folliculorum?***

A. *Demodex folliculorum* is a normal skin inhabitant that has no relationship to rosacea.

B. *Demodex folliculorum,* a highly contagious mite, transmits rosacea from person to person.

C. *Demodex folliculorum* is a mite that appears to stimulate mononuclear cell proliferation.

D. *Demodex folliculorum* can be completely eradicated with tetracycline.

**5. Eileen W is one of your patients who has erythematotelangiectatic rosacea. For many years, she has used metronidazole gel, but she has never had complete relief. She says she is experiencing a flare, and her skin is quite sensitive with persistent facial flushing. Her primary care provider asks for guidance. Which of the following products is appropriate?**

A. Continue metronidazole and an SPF 30 sunscreen; the flare should wane soon

B. Stop metronidazole and sunscreen, and use gentle cleanser only

C. Continue metronidazole and an SPF 30 sunscreen, and begin a trial of brimonidine on a 2-cm area lateral to the eye for at least five consecutive nights

D. Continue metronidazole, an SPF 30 sunscreen, and add ivermectin to the affected area

**6. Joe L. has severe papulopustular rosacea. He has been using 1% ivermectin cream, and taking doxycycline by mouth, but a recent flare is painful and disfiguring. He reports that he is experiencing increased nausea and phototoxicity from the doxycycline. What would be an appropriate way to modify his care plan?**

A. Continue the ivermectin cream, stop the doxycycline, and add low-dose (0.3 mg/kg) or intermittent-dose isotretinoin therapy.

B. Stop the ivermectin cream and the doxycline and switch to brimonidine and low-dose (0.3 mg/kg) or intermittent-dose isotretinoin therapy could be considered.

C. Continue the ivermectin cream, continue the doxycycline, and add calcium carbonate tablets to lessen the nausea.

D. Refer him for vascular laser treatment.

**7. A woman who approaches the cash register with several products. One is a lotion that is often used by people who have rosacea, and she also has three bottles of generic nasal oxymetazoline. Which of the following is the most appropriate discussion to initiate?**

A. "Don't use this oxymetazoline for more than three days for nasal congestion. If you do, you may develop rebound congestion or become dependent on the medication."

B. "Are you satisfied with this redness-reducing lotion? I can show you some others if you like."

C. "Have you found everything you need today?"

D. "Many people who have rosacea use nasal oxymetazoline to self-manage their rosacea. It's messy to use, and it may irritate the skin. Did you know it comes in a prescription cream specifically for rosacea now?"

**8. Kathy R. is a patient in her mid-40s who has been using metronidazole gel 0.75% for her moderate rosacea for many years. She says she would like to try something different since the metronidazole isn't completely effective. You ask the following questions:**

* **What else have you used? She says, "Nothing."**
* **What symptoms are you most concerned about? She says, "Raised spots and pimple-like bumps."**
* **What is most important to you in a topical product? She says, "I don’t like products that are at all greasy. I don’t mind applying them more than once a day. The lighter, the better."**

**Which product would you recommend for a trial?**

A. Azelaic acid 20% foam

B. Metronidazole gel 1%

C. Brimonidine gel 0.33%

D. Oxymetazoline nasal decongestant (applied topically)

**9. Choose the most appropriate product for a patient who has worsening rosacea of the ETR variety who has never been treated with prescription medication before.**

A. Topical brimonidine

B. Topical ivermectin

C. Oral isotretinoin

D. Feverfew

**10. Choose the most appropriate product for a patient who has moderate to severe ETR and PPR combination rosacea, and has been tried on metronidazole topical, brimonidine, and ivermectin with little improvement. He reports that he is missing work several days a month because of flares, and his skin is extremely dry and easily irritated.**

A. Add an alcohol-based cleanser

B. Oxymetazoline

C. Doxycycline 40 mg by mouth daily

D. Topical Azelaic acid

**11. Choose the most appropriate products for a patient who has newly diagnosed mild rosacea and is looking for help in the OTC aisle.**

A. A mild cleanser, any moisturizer for sensitive skin that contains SPF-30

B. A mild cleanser, a loofah pad, and any sunscreen with inorganic dimethicone and zinc oxide

C. A mild cleanser, any sunscreen containing inorganic dimethicone and zinc oxide, and an unscented moisturizing lotion for sensitive skin

D. A mild cleanser, any sunscreen containing inorganic dimethicone and zinc oxide, and a lotion of the patient's choice from the eye-level shelves

**12. A patient who has rosacea is being treated with doxycycline 40 mg daily. He comes to the pharmacy and says that yesterday, he was bitten by a tick. He asks if the doxycycline he's taking for his rosacea will also serve as a preventive for Lyme's disease. What do you tell him?**

A. "Absolutely. That's one of the benefits of using antibiotics for rosacea. You can use them to treat infections.

B. "Yes, but you should double the dose for seven days."

C. "Your physicians should be able to answer that."

D. "No. This product is not FDA approved for treatment or prevention of infection, and the dose is insufficient to prevent Lyme disease."

**13. Which of the following is good counseling advice for a patient who has rosacea and experiences periodic flares?**

A. All patients with rosacea respond about the same to various moisturizers; moisturizers are equally effective in resolving the signs and symptoms of rosacea.

B. Around 25% of patients who have rosacea experience monthly flares; it's important to get used to them and try to ignore them.

C. Consider calling your physician and asking him to prescribe a fluorinated topical corticosteroid that you can use until the flare subsides.

D. Some patients find that keeping a diary, identifying things that seem to be triggers, and taking daily selfies until the flare resolves helps them manage symptoms.

**14. A newly diagnosed patient who has moderate rosacea comes to the pharmacy. You help her select a sunscreen lotion, a moisturizer cream, and fill prescriptions for topical brimonidine gel and an oral tetracycline that she is to take for the next 14 days. As she looks at all of the products, she looks confused, and then asks? "How do I use all of these and can I use my regular makeup?" Which of the part of the following is the appropriate sequence?**

A. Makeup foundation, sunscreen, moisturizer, brimonidine

B. Brimonidine, sunscreen, moisturizer, makeup foundation

C. Sunscreen, moisturizer, makeup foundation, brimonidine

D. Moisturizer, makeup foundation, brimonidine, sunscreen

**15. As a pharmacist, it's your job to manage patient’s expectations. Your newly diagnosed patient asks how long she should plan on using topical medications for rosacea. Please choose the best answer.**

A. Plan on using topical medications until your symptoms resolve. After that it's most likely that you won't need it any longer.

B. A can take 6 to 8 weeks to determine if a product is working for your rosacea. You may need to try a number of different products until you find just the right combination.

C. Most patients respond or don't respond to rosacea interventions within a week or so.

D. Most patients stay on topical medications for a year or two, and then they have to switch to oral systemic medications.

**16. One of your patients who has rosacea was recently diagnosed with hypertension. Which of the following drugs may aggravate his condition?**

A. lisinopril

B. losartan

C. nifedipine

D. propranolol