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Self-Care of Rhinitis During Pregnancy

Pharmacists consult with patients about a host of medical problems, some which are amenable to self-care and some of which require referral to a prescriber. When the patient is pregnant, treatment is far more complicated, since it is critical to avoid harm to the fetus.

Common Nasal Problems During Pregnancy

Pregnant women are subject to the same types of nasal problems as the general population. They include allergic rhinitis and the common cold. Both conditions have been discussed in the pharmacy literature, but the problem of what the prudent pharmacist should recommend for the pregnant patient is a continual conundrum.

Pregnancy Rhinitis

At times, physicians consult with pregnant women who have persistent nasal problems that do not appear to be due to common causes. Eventually, physicians began to question whether their nasal congestion might be due to the pregnancy itself. This theory was controversial, and, according to one expert, pregnancy rhinitis was "observed as a phenomenon for ages, but until recently not recognized as a defined condition worth being taken seriously."[1-3]

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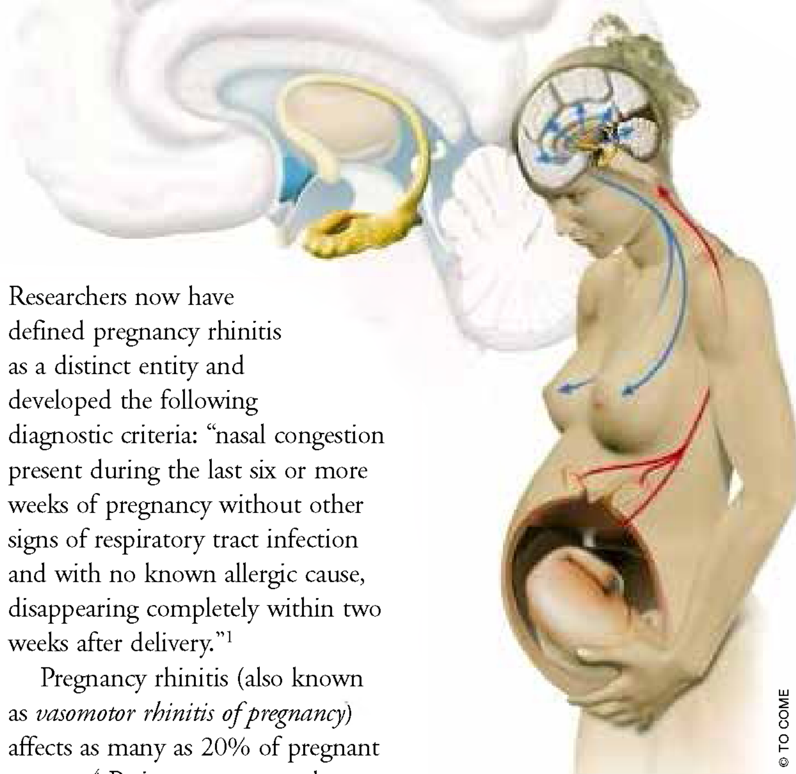

Pregnancy rhinitis may be caused by hormonal changes, such as increased estrogen levels.

Researchers now have defined pregnancy rhinitis as a distinct entity and developed the following diagnostic criteria: "nasal congestion present during the last six or more weeks of pregnancy without other signs of respiratory tract infection and with no known allergic cause, disappearing completely within two weeks after delivery."[1]

Pregnancy rhinitis (also known as *vasomotor rhinitis of pregnancy*) affects as many as 20% of pregnant women.[4] Patients report nasal congestion as the hallmark feature, but they also may experience clear secretions that vary from watery to thick in consistency.

The cause of pregnancy rhinitis is presumed to be the hormonal changes of pregnancy. Estrogen would be a logical cause, as levels increase during pregnancy due to the secretions from the enlarged corpus luteum and the placenta.[2] However, in one study, only 35% of subjects experienced worsening congestion during pregnancy, and 39% actually breathed more easily as the pregnancy proceeded.[1] The roles of progesterone, prolactin, stress, and increased blood volume have been explored, but the true cause of pregnancy rhinitis remains elusive.[1,5]

Risk factors for pregnancy rhinitis include a history of smoking. Maternal age, parity, and fetal gender are not predictive factors.[5]

Safe Interventions For Rhinitis During Pregnancy

Nonprescription products and devices for nasal problems during pregnancy can be divided into two groups. The first group does not carry any precaution for patients who are pregnant. These will be considered first.

There are some interventions for rhinitis during pregnancy that the pharmacist can suggest.[1,3] Pharmacists can reassure patients that the condition is temporary and will resolve after delivery. They can also mention several interventions that will help rhinitis and nasal congestion regardless of cause, such as controlling the environment and avoiding allergens.

Lying in the supine position is widely known to increase nasal resistance to the passage of air. Thus, the pregnant patient can be advised to raise the head of the bed at least 30°, and perhaps as much as 45° to obtain greater patency of the nostrils. She may also be advised to engage in light-to-moderate exercise, an activity that also opens the nasal passages.

Saline lavage may provide some relief for pregnancy or allergic rhinitis, and one expert advises either gently sniffing homemade saline from a cupped hand or using products such as neti pots to administer saline.[1] Unfortunately, neither of these methods uses sterile saline, which would be preferable.[6]

A safer avenue is the use of a nonprescription isotonic saline product such as Simply Saline Nasal Relief Spray. It is sterile when sprayed from the container. Following its use, the patient may attempt to remove nasal debris with the use of small bulbs known as a *nasal aspirator*. While they are often thought of as devices limited to use in nasal congestion in newborns and children, they may also be helpful in pregnant patients.

External nasal dilators are a potential treatment option.[7] Breathe Right Nasal Strips adhere to the outer nostrils, slightly opening the nasal passages to facilitate the movement of air. They are safe during pregnancy and can be recommended as a potential aid for pregnancy rhinitis and nasal congestion from other causes.

Products With a Pregnancy Precaution

The second group of potential interventions for nasal problems during pregnancy includes OTC products for nasal congestion due to the common cold or allergic and/or pregnancy rhinitis (e.g., topical and oral nasal decongestants) and for rhinorrhea due to allergic and/or pregnancy rhinitis (e.g., intranasal mast cell stabilizers or corticosteroids, oral antihistamines). However, each of these products carries an FDA-mandated warning directing patients who are pregnant or breastfeeding to speak to a "health professional" before use. As highly visible and accessible health professionals, pharmacists would therefore be able to give pregnant women verbal approval for use of the product.

> **Take Care With Pregnant Patients!**
>
> Pharmacists should understand the potential liability in making self-care recommendations for pregnant women. A higher standard of care is mandatory due to the patient's condition, as indicated by the pregnancy warnings required by the FDA on the labels of many OTC products. If the pharmacist does recommend a nonprescription product such as a nasal decongestant, and the fetus suffers harm, the burden of proving the product is safe and effective during pregnancy would fall on the pharmacist. Since studies confirming safety and efficacy for the nonprescription products discussed in this article do not exist, the pharmacist would be in a position that would be extremely difficult to defend.

The most prudent advice for pharmacists is to refer these patients to their obstetricians. This is advisable for several reasons. First, pharmacists do not have complete medical records on the pregnant patient, and the list of other medications she is taking might be incomplete. Second, the pharmacist is not privy to medical complications the patient may be experiencing due to the pregnancy (e.g., preeclampsia, hyperemesis gravidarum, threatened early delivery due to polyhydramnios). Third, the pharmacist is not necessarily aware of the patient's concomitant medical conditions that complicate therapy, such as diabetes, glaucoma, cardiac problems, hypertension, and renal or hepatic compromise. Finally, pharmacists should not attempt to diagnose potential pregnancy-related problems through conducting physical examinations of patients for several reasons: 1) pharmacists should not ask the patient to disrobe for examinations; 2) pharmacies seldom possess even the most rudimentary tools of physical examination (e.g., otoscopes); and 3) due to state pharmacy practice acts, pharmacists are prohibited from diagnosing, and therefore are not legally protected if they "misdiagnose" due to such activities.

It would be extremely difficult for a pharmacist to amass the data needed to make a competent recommendation in a self-care counseling session in a busy pharmacy. An interview with the patient is often not reliable due to memory lapses and lack of medical understanding of one's own health status and current medication list. It would be virtually impossible to develop a complete picture of the patient's unique situation that would be equivalent to the comprehensive information already in her file in the obstetrician's office. For these reasons and others (e.g., legal liability in the case of a malformation), the obstetrician is best suited to choose among products with a pregnancy precaution.

Choosing Therapy for Nasal Problems During Pregnancy

Physicians advise their colleagues on appropriate therapy of nasal problems during pregnancy in such journals as the *American Journal of Rhinology*. In one such article, an author placed medical interventions for allergic rhinitis during pregnancy into two tiers.[7] Those on the first tier included intranasal cromolyn, intranasal corticosteroids, and first-generation antihistamines. Drugs relegated to the second tier included decongestants and second-generation antihistamines. It should be noted that no nonprescription product carries an indication for pregnancy rhinitis.

Mast Cell Stabilizer: Intranasal cromolyn (e.g., NasalCrom) is FDA Pregnancy Category B (i.e., no evidence of risk in humans) for pregnant patients.[4] It may be recommended as a first-line agent by the physician for relief of rhinorrhea, sneezing, and nasal itching of allergic rhinitis.[7]

Intranasal Corticosteroids: The sole nonprescription intranasal corticosteroid is triamcinolone acetonide (e.g., Nasacort Allergy 24HR). As a Category C product in pregnancy, risk cannot be ruled out, and pregnant patients were never included in any of the studies on its efficacy and safety.[1] While potential benefit may justify the potential risk to the fetus, this would be a decision best left to the obstetrician. The ingredient relieves nasal congestion, rhinorrhea, nasal pruritus, and sneezing associated with hay fever or other upper respiratory allergies.

First-Generation Antihistamines: The most common nonprescription first-generation antihistamines are diphenhydramine, chlorpheniramine, and clemastine (each is Category B). Relative freedom of risk from malformations justifies their inclusion on the first tier. They relieve rhinorrhea, nasal pruritus, and sneezing of allergic rhinitis or the common cold.

Topical Nasal Decongestants: Topical nasal decongestants were classified as second-tier products for nasal problems in pregnancy.[7] An expert discussing pregnancy rhinitis recommended strongly against the use of topical nasal decongestants such as oxymetazoline (e.g., Afrin, Category C) for pregnancy rhinitis, the major objection being the potential development of rhinitis medicamentosa, even if the patient only self-administered one dose nightly.[1,3]

Oral Nasal Decongestants: Oral nasal decongestants include pseudoephedrine (e.g., Sudafed) and phenylephrine (e.g., Sudafed PE), both Category C. They were also ranked as second-tier agents for nasal rhinitis during pregnancy.[7] One author points out that there are no data to demonstrate the efficacy of these products in pregnancy rhinitis.[1,3] Furthermore, there are potential adverse effects on the fetus with their use for any condition in pregnancy. Risks listed for pseudoephedrine use include gastroschisis (an abdominal wall defect) and vascular disruption defects.[8-10] Neither decongestant has been conclusively cleared of these potential risks.[11] Some authorities recommend that phenylephrine be avoided completely during pregnancy, and that pseudoephedrine should be used cautiously and only after the first trimester has passed.[12]

Second-Generation Antihistamines: Also in the second tier, second-generation antihistamines include those with Category B ratings, such as cetirizine (e.g., Zyrtec) and loratadine (e.g., Claritin), while fexofenadine (e.g., Allegra Allergy), has a Category C rating. In the words of several experts, "the absence of controlled trials in humans and the crossing of the placental barrier makes the avoidance of their prescription necessary during pregnancy."[13] ■

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PATIENT INFORMATION

When You Have Nasal Problems During Pregnancy

Most pregnant women are aware that it is critical to avoid any unneeded medications during pregnancy to prevent harm to the developing fetus. Two of the more common types of medical problems are nasal congestion and runny nose.

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Common Causes of Nasal Problems

The common cold is the number one cause of both nasal congestion and runny nose, along with sore throat and cough. Allergic rhinitis ("hay fever") is another major cause of both runny nose and nasal congestion, usually accompanied by nasal itching, sneezing, and watery eyes. A lesser known problem is *pregnancy rhinitis*, a condition that is not caused by a cold or allergies, but is due to the pregnancy itself.

Where to Turn

It is tempting to speak to friends or family about treatment of nasal problems when you are pregnant. This option is not the best, because these people usually lack any medical training. You may also wish to speak to your pharmacist for advice on nasal problems. Your pharmacist can provide advice on nonmedical interventions to relieve runny nose and nasal congestion, and can also describe safe methods such as nasal dilators and saline lavage.

However, some nonprescription products such as nasal decongestants, antihistamines, nasal steroid sprays, and so forth, carry a warning against use in pregnancy before you speak to a healthcare professional. It is true that your pharmacist is an expert on nonprescription products and their safe usage, but this may not be the best option when products have this pregnancy warning because the pharmacist's ability to make a fully informed decision is hampered by lack of information about your unique situation.

Your obstetrician is the best source for advice on using nonprescription products for nasal problems during pregnancy. The office keeps your medical records in one easily retrieved file, and the office will have the results of your latest exam and any lab work that was ordered. Your obstetrician will also be aware of any special conditions complicating your pregnancy, such as kidney problems, liver problems, heart disease, hypertension, diabetes, and threatened early delivery. Any of these (and a host of other potential problems) might be critical in making a safe decision whether to use a nonprescription product and which product to choose. Your obstetrician might even wish to schedule an appointment to determine whether you need a prescription or OTC product.

Nonprescription products may interact with medications you are currently taking. Your pharmacist can help determine whether they are safe or not in these cases, but you must be able to recall all of the medications you take for your pharmacist to make a fully informed decision.

PHARMACY STAMP

Products to Avoid During Pregnancy

Be sure to take prenatal vitamins and minerals as recommended by your obstetrician. However, it is wise to avoid anything during pregnancy that is not proven safe and effective for your medical problems. This includes all herbal supplements, homeopathics, and other dietary supplements. None of these products has ever been proven either safe or effective, especially not during pregnancy. Any could have harmful effects on the developing fetus. Furthermore, strongly consider immediately stopping use of addictive substances, such as alcohol and tobacco in all forms, and all drugs of abuse.

Remember, if you have questions, Consult Your Pharmacist.