



# When Pregnant Patients Present to the Urgent Care Center

**Urgent message:** Care of the pregnant patient in urgent care can be complex, as every test or treatment needs to take into account both the mother and her unborn child. Conditions which would be considered benign and self-limited in healthy patients take on a different level of concern, and must be managed differently, in the pregnant patient.

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(WITH REVIEW BY EDWARD DENIOUS, MD, FACOG)

## Introduction

There appears to be a wide range of comfort levels within urgent care centers regarding pregnancy. While most obstetrical practices encourage the patient to call their obstetrician first, distance to a clinic or hospital, patient preference, avoidance of higher costs, and emergency room avoidance may all drive patients to an urgent care for issues during pregnancy. Familiarity with pregnancy-related issues should be part of our comprehensive care.

## Diagnosis of Pregnancy

The accuracy of office testing for pregnancy is close to 100%<sup>1</sup> and the usual point-of-care testing for hCG generally gives reliable results as early as 8-10 days postimplantation.<sup>2</sup>

Pregnancy tests measure the beta subunit of human chorionic gonadotropin (hCG), but within this molecular family are a number of variants, including intact, nicked, free, and hyperglycosylated hCG.<sup>3</sup> Reasons for a negative urine pregnancy test can include very low levels of beta hCG or detection of hCG variants, an issue more common in home pregnancy testing and most likely to occur at about 8 weeks gestation when the variant levels are high.<sup>3</sup> There is no standardization of over-the-counter or office-based testing;<sup>4</sup> therefore providers should be aware of potential limitations in their POC product. Use of a quantitative serum hCG can detect lower levels of hCG, improving the clinical sensitivity. The lower detection level also decreases the specificity,



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as low concentrations of hCG can be associated with reasons other than a viable pregnancy, such as molar pregnancy and other neoplasms, recent miscarriage or abortion, fertility medications, urinary tract infection, and other kidney disease.<sup>5</sup>

Serial quantitative hCG measurements can clarify pregnancy status such as miscarriage vs early pregnancy. Most importantly in the urgent care setting, these numbers can suggest an ectopic location. In general, quantitative hCG should double in a normal pregnancy every 48-72 hours until it reaches a level of about 10,000-

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General Health Considerations and Complaints Throughout Pregnancy	
<ul style="list-style-type: none"> <li>• Influenza (and immunization)</li> <li>• Upper respiratory infection</li> </ul>	<ul style="list-style-type: none"> <li>• Oral care</li> <li>• X-rays</li> </ul>

20,000 mIU/mL. Failure to do so should prompt further investigation or referral.

While monitoring serial hCG is a reasonable initial approach, it is best combined with transvaginal ultrasound. In the case where ultrasound cannot demonstrate the location of a pregnancy and the  $\beta$ -hCG concentrations continue to rise, ectopic pregnancy is likely and a clear management strategy should be initiated.<sup>6</sup> This should prompt referral to OB/GYN if not already arranged, or to the emergency room for the symptomatic patient.

### General Health Considerations

Pregnancy does not eliminate the need for preventive health or, for that matter, lower risk for everyday injuries and illness. Some patients may have the mistaken impression that they should not undertake the same precautions as they might have before their pregnancy. The need for immunization, dental care, and proper diagnosis of potential orthopedic injuries, for example, does not diminish—and in some ways it is even greater.

### Influenza and URIs

Given the long and often severe flu season, we should consider influenza in pregnancy. Influenza immunization in pregnancy is recommended by any standard and appears to be safe. Our obstetrical friends encourage immunization; however, vaccine resistance, while unwarranted, is high with about 50% of pregnancy women receiving no vaccine.<sup>7</sup> Influenza in pregnancy is associated with fetal and maternal complications,<sup>8,9</sup> so while much of symptomatology may be “above the belt” the systemic nature of influenza may complicate pregnancy and augment the need for increased surveillance at a level exceeding urgent care offerings.

Antivirals can be used in pregnancy, and ACOG also recommends “postexposure antiviral chemoprophylaxis (75 mg of oseltamivir once daily for 10 days) be considered for pregnant women and women who are up to 2 weeks postpartum (including pregnancy loss) who have had close contact with someone likely to have been infected with influenza.” It again seems prudent to address these issues in the urgent care setting with consultation and close follow-up with your OB consultant.<sup>8</sup>

More commonly, you may see pregnant women at any stage of pregnancy with upper respiratory complaints of a milder nature. Nasal steroids for the common cold seem to be occasionally used, but there isn't good evidence to support offering these despite their low risk in pregnancy.<sup>10,11</sup> There is little evidence to support use of phenylephrine in pregnancy, and while pseudoephedrine had been used for years, a small association with birth defects exists. Primatene mist is now available again in the U.S. and has some association with birth defects in animal studies, among other concerns.<sup>12</sup> First- and second-generation antihistamines are likely safe in any trimester and can be used, though second-generation antihistamines such as loratadine and cetirizine are preferred.<sup>13</sup> For cough, dextromethorphan can be used. Benzonatate was an old Category C-designated cough medicine and should probably not be used. A recent Medical Letter suggests that risk of adverse reactions such as laryngospasm and accidental ingestion by children should necessitate avoidance of this medication.<sup>14</sup>

### Oral Care

Also present throughout pregnancy are changes affecting oral health, with increases in periodontal, gingival, and carious disease that may prompt an urgent care visit. The old wives' tale “Gain a child, lose a tooth” should prompt us to refer our patients for dental care assertively for acute care, as well as ongoing dental care and hygiene throughout pregnancy.

### X-rays in Pregnancy

Just because you're pregnant doesn't mean you stop getting injured. In fact, due to the changes in center of gravity and weight along with relative ligamentous laxity, pregnant women are more prone to accident and injury presumably due to a relative increase in instability. One group found that pregnant women have a fall and fracture rate similar to the elderly.<sup>15</sup> But even minor falls have been suggested as a cause of adverse fetal outcome. In one study there was a four-fold increase in preterm labor, an eight-fold increase in abruption, and a doubling of fetal distress with trauma. It is likely that most falls we would see are minor, and initial assessment and treatment are not dissimilar from the nonpregnant patient, keeping in mind some increase risk to the passenger.

X-rays in pregnancy may cause alarm for patient and providers, but diagnostic x-rays during pregnancy are considered safe. Exposures above 5 rads (about 2 CT scans of the abdomen) might prompt referral or further counseling (to a radiation physicist<sup>16</sup>). To this end, there

is an excellent resource from the Health Physics Society that provides clear answers regarding x-ray exposure with usual imaging.<sup>17</sup>

Even after minor trauma with no apparent involvement of the abdomen, patients should be counseled on risks associated with abrasion, including vaginal bleeding, abdominal or back pain, uterine tenderness, uterine contractions, and firmness in the uterus or abdomen.

It is possible that a pregnant patient with perceived minor trauma from a motor vehicle accident can show up in an urgent care. While presentation may be seemingly benign, there is a strain on the uterus caused by forward motion and contre coup effect that increases pregnancy complications, even in minor accidents.<sup>18</sup> As evaluation of the patient may require more advanced imaging, including urgent ultrasound and possibly MRI along with lab testing (when was the last time you did a Kleihauer Betke test?), referral to the emergency room is reasonable, especially after 23 weeks.<sup>19</sup> Risks to the pregnancy are less clear in the first trimester. (In fact, entering relevant terms into a search engine produces a list dominated by law firm websites.)

Traumatic injury and depressive presentations might also prompt the savvy urgent care practitioner to consider evaluation for intimate partner violence (IPV). While there is no clear data suggesting that IPV is *more* common during pregnancy, it is associated with numerous negative pregnancy outcomes.<sup>20</sup> Awareness of reporting requirements, documentation, safety planning, and appropriate referrals should be part of the care we provide. Informational posters and pamphlets in your clinic, including the bathrooms, may be helpful for those patients unable or unwilling to disclose abuse.

## First Trimester

### General

Patients may present with bleeding or spotting, and the differential can include threatened or missed abortion, tubal pregnancy, or infection. A fetal Doppler is a relatively inexpensive device and should be able to identify fetal heart tones at approximately 10-12 weeks—though in practice 12-14 weeks is more likely given variations in body habitus. Fetal heart tones measure in the range of 120-160 bpm. As point-of-care ultrasound devices drop in price, urgent care operators might consider this in addition to its other uses.

### Medications

Prescribing *any* medication to a pregnant patient presents a host of concerns for possible complications. Risk can be

### Health Considerations and Complaints in the First Trimester

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| <ul style="list-style-type: none"> <li>• Medication safety</li> <li>• Nausea and vomiting</li> <li>• Vaginal bleeding</li> </ul> | <ul style="list-style-type: none"> <li>• Miscarriage</li> <li>• Ectopic pregnancy</li> </ul> |
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minimized with close attention to institutional regulations regarding medications appropriate for this population. Some EMR systems have the capability to flag those that are not considered to be safe. Guidance may also be obtained by consulting the FDA's Pregnancy and Lactation Labeling Rule, which replaced the agency's A, B, C, D, and X categories.

### Nausea and Vomiting

Nausea and vomiting affect 50% of pregnant patients in the first trimester.<sup>21</sup> Severe vomiting or symptoms that extend beyond the more common window of 4-12 weeks estimated gestational age (EGA) might prompt consideration of other issues. Erroneous dates and multiple fetuses might be obstetrical causes, while gall bladder disease or diabetes might be nonobstetrical issues to consider.<sup>22</sup> Intravenous fluid itself improves symptoms and, if available, a dextrose-containing solution may work a little better at reducing nausea and will reduce embryos' and fetal exposure to ketosis.<sup>23</sup> The ability to provide parenteral hydration, particularly in consultation with your obstetrical consultants, provides a valuable service and can relieve immediate complaints.<sup>23</sup>

Some complementary medical practices such as acupuncture and acupressure (eg, wristbands) may have benefit in the treatment of pregnancy-associated nausea and vomiting.<sup>24</sup> Ginger seems to have some value above placebo, as does B6 alone.<sup>24</sup> B6 is generally prescribed in relatively large doses of 25 mg 3 times daily<sup>25</sup> and doesn't seem to be associated with any adverse fetal outcomes.<sup>26</sup> First-line antiemetic therapy can be antihistamines (such as diphenhydramine 25-50 mg every 4-8 hours) or phenothiazines<sup>27</sup> such as promethazine 25 mg orally or rectally every 4 hours. These groups of medications have shown benefit above placebo and appear to be safe for use in pregnancy.

A combination of B6 and doxylamine (trade name Diclegis) is also used as an antiemetic. This is a delayed-release product containing 10 mg each of doxylamine and pyridoxine and was listed as Pregnancy Category A when that system was used. The labeling now reads "No increased risk for congenital malformations has been reported in epidemiologic studies in pregnant women." The combination of the medications seems to be syner-

Health Considerations and Complaints in the Second Trimester	
<ul style="list-style-type: none"> <li>• General pain and discomfort</li> <li>• Vaginal discharge</li> <li>• Pregnancy rhinitis</li> <li>• Edema</li> </ul>	<ul style="list-style-type: none"> <li>• Shortness of breath</li> <li>• Gastroesophageal reflux disease</li> <li>• Asthma</li> <li>• Urinary tract infection</li> </ul>

gistic.<sup>28</sup> Cost can be an issue if Diclegis is not covered by the patient's insurance. In such cases, it may be advisable to consult with or refer to an obstetrician with experience instructing patients on dosing the two over-the-counter components of this medication.

A reasonable off-label usage of extant OTC options would be B6 10-25 mg 3-4 times daily and adding doxylamine (Unisom SleepTabs) 12.5 mg 3-4 times daily.<sup>28</sup> Ondansetron until recently was commonly used in pregnancy as it appears to have better results than B6 and placebo, but there have been some concerns about reported risks of teratogenicity. A recent article did not find significant association with birth defects,<sup>29</sup> but for the time being its use should not be considered first line.<sup>30</sup> Antiemetics such as metoclopramide and methylprednisolone can also be used as second-line choices for hyperemesis, but by this point referral or consultation with obstetrics is warranted.

### ***Vaginal Bleeding***

#### ***Miscarriage***

While miscarriage is a potential issue in the first trimester, occurring in at least 30% of pregnancies,<sup>31</sup> vaginal bleeding can occur in early pregnancy with or without miscarriage. Patients who present with a primary complaint of unusual bleeding may not yet know their pregnancy status. Examination may review blood or tissue per os, a friable cervix, or an open cervix, but providers might refrain from definitive diagnosis without further imaging, serial hCG measurement, or consultation. The absence of visible tissue or an open cervical os should prompt an evaluation for viable uterine pregnancy vs ectopic, and should be ascertained with transvaginal ultrasound.<sup>32</sup> The patient needs to be aware of their Rh status, as Rh-negative women with any bleeding before 20 weeks' gestation are commonly given RhO(D) immune globulin (RhoGam) within 72 hours to suppress Rh alloimmunization, the standard of care in the United States.<sup>32</sup> While it is unlikely RhoGam would be offered in the urgent care setting, discussion of the importance of close obstetrical follow-up is essential.

### ***Ectopic Pregnancy***

Ectopic pregnancy is always a concern in a patient with a positive pregnancy test and bleeding, with or without abdominal pain. It is estimated that up to 2.4% of pregnancies are extrauterine,<sup>33</sup> and the clinical presentation may range from asymptomatic and incidentally found tubal pregnancies to severe hemorrhagic shock. They are most commonly diagnosed in the sixth through ninth weeks of gestation with presenting complaints of mild vaginal spotting with aching pelvic pain,<sup>33</sup> but symptoms can resemble other concerning intraabdominal processes such as appendicitis or adnexal infection. Of course, a positive pregnancy test should prompt further investigation. Because diagnosis of extrauterine pregnancy requires serum hCG measurement and formal transvaginal ultrasound, referral to OB or the ED is probably the safest approach. If your urgent care center can administer these tests in a timely manner, the decision tree for follow-up depends on visualization of an extrauterine mass with a positive pregnancy test, without intrauterine pregnancy. Inability to find such a mass in the appropriate clinical setting should prompt an expanded differential and close follow-up.<sup>34</sup>

### **Second Trimester**

Most often, by the second trimester you will be dealing with patients who know they are pregnant. As such, they are also more likely aware (and worried) that anything affecting their own health is also affecting the health of the fetus. Further, there are issues in the second trimester directly related to the pregnancy that may be safely managed in the urgent care.

### ***General Pain and Discomfort***

Round ligament pain, which is most prevalent in the second trimester, is a benign cause of abdominal discomfort presenting with reproducible unilateral pain and no peritoneal signs, thought to be caused by stretching of the suspensory ligaments of the growing uterus during the second trimester.<sup>35</sup> Similarly, onset of low back pain may prompt an urgent care visit. Commonly, this is due to an increase in uterine weight and relative weakness in abdominal muscles, but red flags might include trauma, vaginal bleeding, fever, or associated abdominal pain or contractions.

### ***Vaginal Discharge***

Vaginal discharge generally changes during pregnancy, increasing such that it may be mistaken for vaginitis.<sup>36</sup> Physiologic discharge of pregnancy usually is whitish or

clear with little odor. Greenish or yellow discharge with a strong odor and associated redness or itching should prompt further investigation. Bacterial vaginosis and vaginitis during pregnancy are linked to increased risk of preterm delivery<sup>37</sup> and when symptomatic, patients present with malodorous discharge, vaginal pH >4.5, and the presence of clue cells. They are generally treated with metronidazole 250 TID x 7 days or clindamycin 300 BID x 7d. Vaginal treatment is also acceptable with metronidazole gel or clindamycin cream.<sup>38</sup>

Pregnant women are more prone to candidiasis<sup>39</sup> due to hormonal changes, and office diagnosis remains observation of the organism (hyphae or budding yeast) on wet prep with saline or 10% KOH. If this is negative, one can consider culture for *Candida* or empirical treatment with topical azole therapy for 7 days.<sup>40</sup> While there is some basis for safety profile of fluconazole orally in pregnancy, there also appears to be enough concern for fetal adverse effects that topical antifungals should be preferably used.<sup>41</sup>

### ***Pregnancy Rhinitis***

Nasal congestion due to “pregnancy rhinitis” is common, affecting roughly a third of women in the second trimester, and is thought to be due to hormonal changes.<sup>42</sup> Unfortunately, there are no well-studied treatments for pregnancy rhinitis. Topical nasal steroids may be useful if there are underlying allergic causes.<sup>43</sup> Oral decongestants are generally not recommended.

### ***Edema***

Edema may present throughout pregnancy. Normally, total body water increases by 6-8 L during pregnancy,<sup>44</sup> and unless indicative of preeclampsia this is managed conservatively with loose clothing and elevation of affected extremities. Resting in the left lateral decubitus position theoretically improves lower extremity circulation by moving the uterus off the inferior vena cava. Compression hose can help, but there is a tendency toward varicosity formation which is not prevented by these measures.<sup>45</sup> Varicosities can be uncomfortable and can include vulvar symptoms, which should be referred back to OB. Diuretics are not generally used in pregnancy and would be avoided in the urgent care center.

### ***Shortness of Breath***

Similarly, shortness of breath may develop due to uterine growth and hormone changes and is a common complaint in the second and third trimester. There is a relative increase in pulmonary embolism during pregnancy; VTE is roughly 10 times more common in preg-

nancy, complicating roughly 1/1,000.<sup>46</sup> Diagnosis is more difficult due to the physiologic changes of pregnancy that may mimic those of VTE; D-dimer testing should be performed cautiously in the urgent care setting,<sup>47</sup> as there is currently some debate about the variable levels fluctuating during pregnancy.<sup>47</sup>

Therefore, if there is clinical suspicion or the presence of risk factors such as prior VTE, heritable thrombophilia, age >35, smoking, or immobility, referral to the ED is warranted for more advanced imaging and consultation. If available, compression ultrasound is helpful for extremity DVT evaluation; however, MRI is now recommended for evaluation of pelvic DVT suspicion.<sup>48</sup> Even more confusing are the various choices to evaluate for pulmonary embolism. Suspicion of PE should be evaluated emergently in the ED.

### ***Gastroesophageal Reflux Disease (GERD)***

Gastroesophageal reflux disease may develop in the second trimester as uterine growth starts displacing organs upwards, complicated by hormonally related relaxation of the lower esophageal sphincter and a relative decrease in gastric motility.<sup>49</sup> Symptoms that occur later in the second or third trimesters or are severe should prompt investigation for other issues such as GB or PUD, preeclampsia with HELLP syndrome. Aluminum-, magnesium-, or calcium-containing antacids should be first line. H<sub>2</sub> blockers are generally considered safe during pregnancy,<sup>50</sup> as are proton pump inhibitors<sup>51</sup> (though under the FDA's previous system omeprazole was listed in category C).

### ***Asthma***

Asthma is the most common chronic medical condition reported in pregnancy,<sup>52</sup> and exacerbations may certainly present to urgent care. For years we have been taught that roughly a third of pregnant patients improve, a third remain the same, and a third worsen.<sup>53</sup> Compared with pregnancy uncomplicated by asthma, the gravid asthmatic is at risk of a range of perinatal complications.<sup>54</sup>

Since an urgent care provider is most likely to see an exacerbation of underlying disease, we should be comfortable recommending use of inhaled beta agonists. Recommendations can also include double ICS for 7-10 days or adding oral corticosteroids.<sup>55</sup> It seems that acute care providers are reluctant to use steroids in their pregnant patients,<sup>56</sup> but these are no less indicated in a pregnant patient who has failed other measures. There may be small potential increases in cleft lip, preeclampsia, and low birth weight with systemic corticosteroids, but it isn't possible to ascertain whether this is due to the medica-

### General Health Considerations and Complaints in the Third Trimester

- Rash
- Preeclampsia

tion or the underlying disease.<sup>57</sup>

#### UTI

Urinary tract infection can be a complication at any point in pregnancy. There is a higher frequency of bacteriuria during pregnancy, so we should perhaps consider urinalysis another “vital sign” assessment for the pregnant patient. Asymptomatic bacteriuria may be noted by the presence of leukocyte esterase or nitrite on a dipstick, though urine culture is the standard for this diagnosis and is generally done as screening in the first and third trimesters. If you have evidence of asymptomatic bacteriuria, consider culturing the urine and forwarding the information to the obstetrical provider, and treat the patient as this condition can develop into cystitis or pyelonephritis and is associated with increased risk of intrauterine growth retardation and low birth weight. Symptomatic cystitis can be managed in the urgent care setting, but providers should be aware that symptomatic infection is associated with preterm labor and lower birth weight.<sup>58</sup> Urine culture should be obtained, with the results communicated to the OB, particularly if Group B *Streptococcus* is identified as this has ramifications for antibiotic management in the third trimester. Nitrofurantoin and sulfonamides can be used in the second trimester, but are better offered as second-line choices in the first trimester due to data suggesting a higher rate of birth defects.<sup>59</sup> Toward the end of pregnancy, these two agents are associated with neonatal jaundice and kernicterus, while nitrofurantoin is also potentially a cause for neonatal hemolytic anemia in G6PD mothers.<sup>60</sup> So, when possible, first-line choices throughout pregnancy should be amoxicillin 500 q 8-12 hours for 3-7 days or cephalexin 500 every 6-12 hours for 3-7 days.<sup>60</sup> Relatively longer courses, such as 7 days of treatment, may be beneficial compared to nonpregnant women.<sup>61</sup> Pyelonephritis should be suspected if there are signs of sepsis such as fever, chills, nausea and vomiting, and flank pain. Contractions may occur. Suspected pyelonephritis in the pregnant patient should be referred to the ED in most cases. While there is support for outpatient treatment in some situations,<sup>62</sup> these decisions should be made after assessment of fetal and maternal wellbeing and likely in consultation with an obstetrician.

#### Third Trimester

There are critical issues that present primarily in the third trimester, such as preeclampsia, preterm labor, and amnionitis. Depending on your local scenario, it may be prudent to at least assess a pregnant patient in the urgent care for stability and triage. Headache, severe edema, elevated blood pressure, decreased fetal movement, or imminent delivery might prompt EMS transport from your facility. Other complaints are safer to treat in the urgent care setting.

#### Rash

Pruritic urticarial papules and plaques of pregnancy (PUPPP) is one of the more common pregnancy-related dermatoses, occurring in about 1 in 300 pregnancies, usually in the third trimester.<sup>63</sup> As the name implies, this is an intensely pruritic rash, often on the abdomen and along striae. There are no adverse outcomes known, and treatment is largely supportive with antihistamines and topical corticosteroids.<sup>64</sup>

Patients with pruritus but no obvious lesions might be considered for cholestasis of pregnancy. Intrahepatic cholestasis of pregnancy may cause pruritus with rash and has been associated with increased fetal mortality and, if suspected, requires increased antenatal surveillance and discussion with obstetrics. This suspicion is confirmed with laboratory testing, and severe cases may require ursodiol. From an urgent care perspective, suspicion might prompt securing alkaline phosphatase levels, LFTs including bilirubin and bile acid levels, and prompt follow-up with their OB.

#### Preeclampsia

In the U.S., the rate of preeclampsia is 3.4%,<sup>65</sup> with contributing factors of smoking and obesity. With symptoms ranging from mild to severe, it is associated with new-onset proteinuria (more than 1+ on a dip, BP > 140/90) after 20 weeks gestation. Symptoms can include severe headaches, visual changes, edema, and abdominal pain.

Laboratory abnormalities can include thrombocytopenia, abnormal LFTs, renal insufficiency, and hyperuricemia.<sup>66</sup> It may superimpose on chronic or gestational hypertension (new onset HTN after 20 weeks without proteinuria). HELLP syndrome is a concerning complication of hypertensive disease, which can have sudden onset of H(emolysis) E(levated) L(iver enzymes) L(ow) P(latelets) and can progress to DIC, renal failure, pulmonary edema, and placental abruption. If suspected, referral to the emergency room is warranted with transportation by EMS.

## Postpartum Issues

Even a healthy delivery does not preclude the possibility of a patient presenting with complaints directly related to her pregnancy. Bear in mind that there should still be concern for the newborn in mothers who are breastfeeding.

### Postpartum Preeclampsia

Preeclampsia, unfortunately, may persist or even originate in the postpartum period, occurring up to 4 weeks after delivery.<sup>67</sup> In one study, 2/3 of patients had no antecedent diagnosis of hypertensive disease in the recent pregnancy, and most cases occurred in the week after delivery.<sup>68</sup> The most common presenting symptom is headache, and if there are notably elevated blood pressures the possibility of postpartum preeclampsia should be considered.

As with preeclampsia during gestation, evaluation for proteinuria and edema can be done at the urgent care center. Uric acid and liver function tests can be performed, as well, if you have that capability. If you have an onsite lab that can do spot urine protein, diagnosis of preeclampsia prior to obtaining 24-hour urine protein collection is now possible in the urgent care utilizing the ratio of urine protein and creatinine. These values can be placed in a calculator (such as one on the website perinatology.com). At the very least, a dipstick determination of 1+ or more is suspicious.<sup>69</sup> As there is the possibility of progression to eclampsia or HELLP syndrome, immediate referral is warranted.

### Mastitis

Mastitis is a relatively common problem, occurring in approximately 10% of breastfeeding mothers, most commonly in the second and third weeks postpartum.<sup>70</sup> Clinically, it can present as localized breast tenderness with erythema to a septic picture with pain, malaise, myalgia, and high fevers. While local culture or milk culture can be obtained, the organism most frequently implicated is *Staphylococcus aureus*.<sup>70</sup> Cephalixin or dicloxacillin are good first-line choices for most patients, but other common choices include amoxicillin/clavulanate, clindamycin (especially if MRSA is suspected). Bactrim is not recommended in women breastfeeding infants <2 months due to risks of kernicterus, but extensive review of sulfonamides near term and during breast feeding found no adverse reactions.<sup>71</sup> Breastfeeding with good drainage of the breast is encouraged during treatment. Establishment of improved breast feeding technique might require referral to a lactation consultant.

## General Health Considerations and Complaints Postpartum

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| <ul style="list-style-type: none"> <li>• Postpartum preeclampsia</li> <li>• Mastitis</li> </ul> | <ul style="list-style-type: none"> <li>• Postpartum hemorrhage</li> <li>• Postpartum depression</li> </ul> |
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### Postpartum Hemorrhage

Postpartum hemorrhage (PPH) is defined as either primary or secondary, depending on whether it happens in the first 24 hours after delivery. In the urgent care setting, it would seem more likely to see secondary PPH, which can present up to 12 weeks postpartum and in somewhere around 1% of pregnancies.<sup>72</sup> Following delivery, most women will have a period of lochia, a musty-smelling dark discharge which lightens in the weeks after delivery. A patient may present with sudden bleeding after lochia has tapered, but bleeding can be occult so patients may present with hypotension, tachycardia, lightheadedness, and other signs of near or overt syncope. Uterine atony would be less an issue after the initial postpartum period, so more likely causes of increased may include retained placental tissue, infection, and vascular anomalies.

A history of primary PPH is often present.<sup>73</sup> Depending on your comfort level, speculum exam may reveal retained placenta or other tissue in the os. Because of the varied causes and management options, ranging from conservative care to uterine evacuation, and the potential need for advanced imaging or labs, referral to the ED after determining or securing hemodynamic stability, or immediately to an obstetrician is warranted for the patient with acute worsening of post part bleeding.

### Postpartum Depression

Recognizing a presentation of increased sadness, poor sleep, and other mood changes in the postpartum period should prompt close follow-up and referral.

The most commonly recommended validated tool is the Edinburgh Postnatal Depression Scale.<sup>74</sup> The EPDS is 10 questions and therefore probably beyond the scope of most urgent care centers, but awareness of three key components of the scale—self-blame, anxiety, and fearfulness<sup>74</sup>—might prompt a provider to consider the diagnosis and refer appropriately. PPD is generally treated with psychological support and other nonpharmacologic interventions.<sup>75</sup> ■

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