Common Sleep Disorders in Pregnancy

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Sleep is a homeostatically regulated reversible quiescent state, during which there is reduced sensitivity to environmental stimuli. Compared to men, women have a greater risk of sleep disorders and report higher rates of sleep disturbance. Conservation of sleep during evolution points to its importance, and we spend about one third of our life sleeping. However, sleep, like all other human biological traits, has a range of normal phenotypes as well as known pathological states. Many patients come into pregnancy, with a pre-existing sleep issue. Sleep disturbances are commonly reported during pregnancy, affecting more than one-half of all pregnancies and increasing as gestation progresses. The pervasiveness of sleep complaints during pregnancy may lead to a belief that these symptoms are normal or to be expected. Unfortunately, this perception may impede the accurate diagnosis of sleep disorders during this crucial time. Pregnancy-related anatomic, physiologic, hormonal and psychological issues can exacerbate these pre-existing sleep issues but can also case new-onset sleep disruption.

The purpose of this document is to outline important considerations for obstetricians taking care of pregnant patients with sleep-related complaints. **Obstructive Sleep Apnea (OSA), Insomnia**, and **Restless Leg Syndrome (RLS)** are the most common sleep disorders in pregnancy. Hormonal and physiologic changes throughout the life span appear to influence a woman's ability to get a good night's sleep. This review outlines epidemiology, work-up and management of these common sleep disorders in pregnancy.

Prevalence

Sleep disturbances are common in pregnancy, with prior studies estimating that up to 42% of people experience sleep disturbances such as insomnia in antepartum period. [1] One potentially high-risk group for sleep disturbances is people who are hospitalized for pregnancy complications. Antepartum hospitalization occurs in about 1% of all pregnancies. [2] This study suggests that hospitalized pregnant patients sleep about 1 hour/day less than outpatients. Fewer awakenings and reduced wakefulness after sleep onset among inpatients may reflect increased use of sleep aids in hospitalized patients.[3] In the 2007 National Sleep Foundation Sleep in America Poll that focused on women, 18% of respondents reported that they were told by a medical professional that they have a sleep disorder.[4]

Classifications

The International Classification of Sleep Disorders: Diagnostic and Coding Manual, Third Edition, classifies approximately 80 known sleep disorders into 7 major diagnostic sections that include:[5]

1. Insomnia;
2. Sleep-related breathing disorders;

3. Central disorders of hypersomnolence;
4. Circadian rhythm sleep-wake disorders;
5. Parasomnias;
6. Sleep-related movement disorders; and
7. Other sleep disorders.

Getting Enough Sleep?

Good sleep is essential for our health and emotional wellbeing. Getting enough sleep and good sleep quality are essential for healthy sleep. The amount of sleep you need changes as you age. the daily recommended sleep you need changes as you age. *See table 1 below.*[6]

Age Group	Age	Sleep Recommended Daily
Newborn	0 – 3 months	14 – 17 hours
Infant	4 – 12 months	12 – 16 hours (including naps)
Toddler	1 – 2 years	11 – 14 hours (including naps)
Preschool	3 – 5 years	10 – 13 hours (including naps)
School age	6 – 12 years	9 – 12 hours
Teen	13 – 17 years	8 – 10 hours
Adult	18 – 60 years	7 or more hours
Adult	61 – 64 years	7 – 9 hours
Adult	65 years and older	7 – 8 hours

Table 1. Daily recommended sleep by Centers for Disease Control and Prevention (CDC); 15 March 2024.

OBSTRUCTIVE SLEEP APNEA (OSA)

Obstructive sleep apnea (OSA) is a common disorder affecting 26% of the U.S. adult population, and 10% have moderate to severe disease. It is associated with adverse health outcomes including excessive sleepiness, impaired quality of life (QOL), increased motor vehicle crashes, and cardiovascular events. [7] OSA is defined by repetitive upper airway collapse and arousals from sleep, traditionally quantified with testing during sleep by the apnea-hypopnea index (AHI), respiratory disturbance index (RDI) or respiratory event index (REI). Frequent snoring during pregnancy has been well-characterized and survey based studies have consistently demonstrated that OSA symptoms, including snoring, increase as pregnancy progresses.[8] Many of the physiologic changes of pregnancy predispose of OSA. Increased upper airway edema and nasal congestion, and reduction in functional residual capacity area all predisposing factors, because they contribute to decreased patency and increased collapsibility of the upper airway.

An apnea-hypopnea index (AHI) of 5 – 14.9 is typically considered mild sleep-disordered breathing, and 15 or higher is considered moderate-to-severe sleep-disordered breathing. The Sleep Disordered Breathing Sub-study of the nuMom2b (Nulliparous pregnancy Outcomes: Monitoring Mothers-to-Be) study, enrolled more than 3,000 demographically and geographically diverse nulliparous participants. Sleep-disordered breathing was found in 3.5% of participants in early pregnancy and increased to 8.2% in the second trimester, with 5.2% of participants being found to have new-onset sleep-disordered breathing in pregnancy.[9] The vast majority of apneic events were obstructive, indicating that almost all individuals identified as having sleep-

disordered had OSA. Additionally, the vast majority of cases, both in early and mid-pregnancy, were mild.

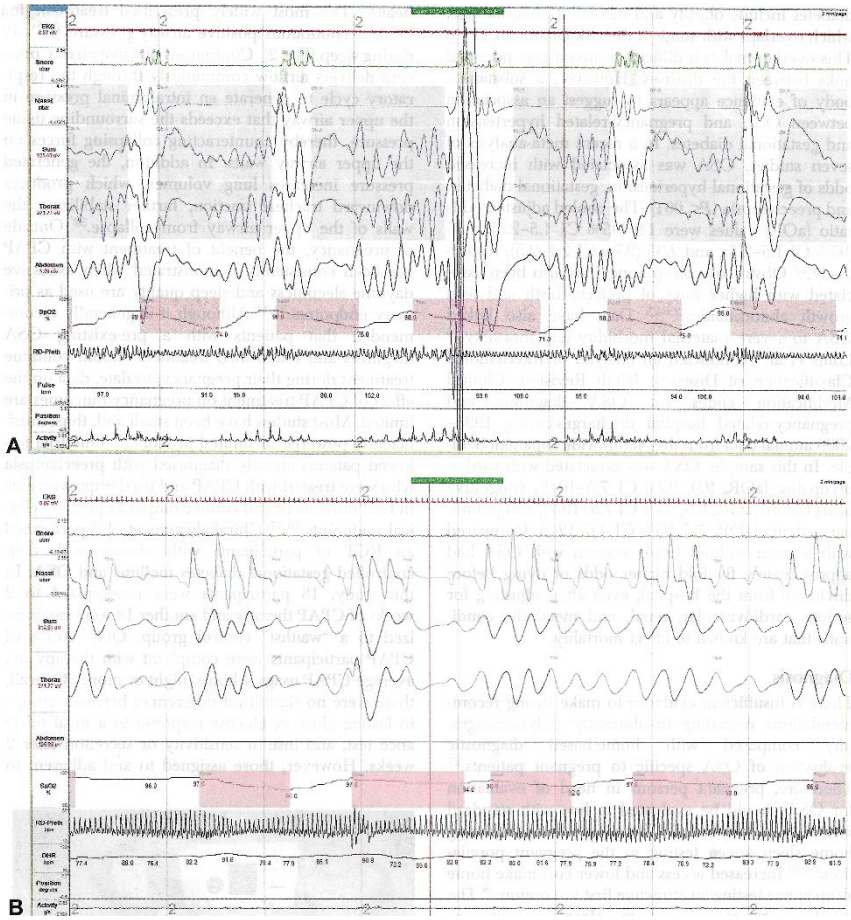

Figure 1. Obstructive Sleep Apnea.

Polysomnography-based study, the apnea-hypopnea index (AHI) – sleep-disordered breathing events. Each figure represents two minutes of recorded sleep. Oxygen desaturation (desat) marked in *red boxes.*
A Obstructive sleep apnea (OSA);
B Hypopnea (Hyp.)

Examples of sleep-disordered breathing events.

Risk Factors:

Risk factors for OSA in pregnancy include self-reported snoring, higher body mass index (BMI), older age and the presence of chronic hypertension, all well-established risk factors for OSA outside of pregnancy.[10] Excessive gestational weight gain is theorized to be a risk factor for developing new-onset OSA in pregnancy. The nuMoM2b study reported a difference in rate of weight gain among participants found to have OSA in the second trimester; however, weight gain, in and of itself, was not highly predictive of OSA status. Instead, that study confirmed previous work that frequent snoring, chronic hypertension, greater maternal age, higher BMI, larger neck circumference, and systolic blood pressure were strongly associated with an increased risk of OSA in pregnancy.[11]

Association with Adverse Pregnancy Outcomes

Obesity and OSA can have a synergistic and interactive effect on the body, each contributing to increased morbidity and severity of complications, such as chronic hypertension and type 2 diabetes mellitus.[12] OSA has been linked to enhanced inflammatory and oxidative stress

responses, endothelial damage, and metabolic derangements. These same biological pathways have been associated with adverse pregnancy outcomes. In a recent study, OSA was associated with associated with increased odds of gestational hypertension, gestational diabetes, and preeclampsia.[13] OSA has also been associated with higher rates of preterm births and fetal growth abnormalities.[14]

Data have also been linked OSA to severe maternal morbidity and mortality.[15] Compared with women without OSA, women with OSA had approximately five-fold higher odds of dying before discharge from the hospital, even after adjusting for serious cardiovascular, renal and metabolic conditions that are known to affect mortality.

Screening and Treatment in Pregnancy

There is insufficient evidence to make strong recommendations regarding in-laboratory polysomnography compared with home-based diagnostic evaluation of OSA specific to pregnant patients.[16] Therefore, pregnant women in need of evaluation for OSA should be evaluated in line with standard institutional guidelines. The most widely prescribed treatment for OSA is continuous positive airway pressure (CPAP) during sleep. *See figure 2 below*

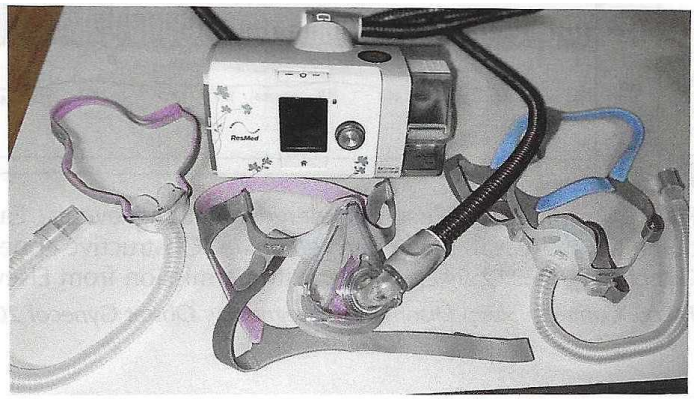

Figure 2. Continuous positive airway pressure (CPAP) machine and common masks.
From left to right: nasal pillows, full face mask, and nasal mask.

Continuous positive airway pressure delivers airflow continuously through the respiratory cycle to generate an intraluminal pressure in the upper airway that exceeds the surrounding tissue pressure, thereby counteracting collapsing forces on the upper airway walls. In addition, the generated pressure increases lung volumes, which produces downward tracheal traction, further stabilizing the walls of the upper airway from collapse.[17] although it is generally recommended that patients with a pre-existing OSA diagnosis and established treatment should continue treatment during their pregnancy, to date, data on the effect of CPAP treatment on pregnancy outcomes are limited. Most studies have been small, and thus, insufficiently powered or limited in scope. However, we do recommend evaluation of patients who come into pregnancy with a known diagnosis of OSA, and patients who present to prenatal care with severe OSA-related complaints such as severe daytime drowsiness or debilitating fatigue.

CPAP is considered safe and effective in pregnancy. Most patients are expected to require a pressure increase in the 1 – 3 cm H_2O range during the second trimester, but CPAP devices can often set to an auto-adjusting mode to address this.[18] Pregnancy-induced changes in nasal congestion and weight may necessitate adjustments in mask fit and humidification.

Delivery and Postpartum Considerations

General anesthesia for cesarean delivery in OSA patient, should not be the first line as an anesthetic choice but cannot always be avoided. Many of precautions related to general endotracheal anesthesia for morbid obesity are applicable of OSA parturients.[19] An analgesic strategy that minimizes the need for systemic opioids should be considered, and opioids, when used, should be ordered as single dose rather than standing orders. Monitoring of maternal oxygen saturation should be considered for those getting systemic opioids and patient should wear their CPAP machine while in the hospital recovering from their delivery, as well as when they are discharged home. Post-delivery consultation with an anesthesiologist to plan intrapartum and post-delivery pain management can also be considered.

INSOMNIA

Insomnia, is characterized by complaints of difficulty initiating or maintaining sleep, early morning awakening, or non-restful sleep, occurring three or more nights a week, despite an adequate opportunity for sleep. *Insomnia disorder* is defined by functional impairment or significant distress related to these sleep difficulties. Symptoms of insomnia are highly prevalent throughout pregnancy and the postpartum period. The prevalence of insomnia in the first and second trimester is about 25%, and can peak in the third trimester at 60%. Postpartum insomnia prevalence remains as high as 55%.[20] Poor sleep quality is associated with more anxiety and depression complaints during pregnancy and the postpartum period.

Risk Factors

Many psychiatric disorders including anxiety, depression, bipolar disorder, and posttraumatic stress disorder are strong risk factors for insomnia. Genetic factors are predisposing factor because there is an increased risk of developing insomnia in those with a family history of insomnia. Social factors and environmental disturbances can also contribute to the development of sleep disturbance. Examples include middle of the night awakenings for pet or childcare. Sleep disturbances due to bed partner's sleep-wake schedule can also predispose the development of sleep disturbance. Predisposing factors require a precipitating factor to progress to acute symptoms.

Pregnancy is a particularly vulnerable state with a multitude of precipitating factors to insomnia. Nausea and vomiting in the first-trimester can lead to frequent nightly awakenings and difficulty getting to sleep. As gestation progresses, round ligament pain, acid reflux, positional discomfort, nocturia, nocturnal fetal movement, and eventually contractions in the third trimester are other potential precipitating factors. Additionally, pregnancy is associated with multiple psychological stressors related to the life changes associated with pregnancy and childbirth, which can lead to anxiety and highly rumination. Once symptoms occur, patients may develop maladaptive behaviors to compensate for their sleep disturbances that can perpetuate symptoms such that the acute condition develops into a chronic disorder.[21]

Associated Adverse Pregnancy Outcomes

There is a strong evidence that short sleep duration (less than 7 hours/night) in pregnancy is a risk factor for adverse pregnancy outcomes, particularly gestational diabetes.[22] However, it is very important to note that all patients with insomnia have shortened sleep disturbances and vice versa. Insomnia during the perinatal period has also been linked to perinatal depression and anxiety symptoms.[23]

Evaluation and Management

The regularity of sleep schedule, use of naps, and behaviors pursued when the patient cannot sleep are important to review to identify maladaptive perpetuating factors. Depression commonly coexists with insomnia and should be routinely assessed in any woman with insomnia complaints. A safety assessment should also be performed to exclude intimate partner violence as a precipitant. Laboratory testing is rarely indicated but thyroid function testing may be considered in a woman who has other signs or symptoms to suggest hyperthyroidism, which commonly produces insomnia symptoms.[24]

Non-Pharmacologic Treatment: This treatment is the most appropriate first step in addressing insomnia complaints. We recommend beginning with education on sleep hygiene and physiology of normal healthy sleep, highlighting the roles of sleep-deprivation and circadian rhythms in increasing the homeostatic pressure within the brain to fall asleep as a framework for understanding the behavioral recommendations for treating insomnia. Sleep hygiene includes ensuring a comfortable sleep environment, regularity of sleep schedule, regular exercise, and allowing time for the patient to unwind before bedtime and relieve the mind of any stressors.

Caffeine, alcohol, and nicotine use should all be minimized given their adverse effects on sleep. Ideally, caffeine intake should be curtailed 8 – 10 hours before bed-time given the potentially long half-life of it. Any precipitating factor including medical complaints or stressors due to pregnancy itself should be addressed.

Behavioral Treatment: Cognitive behavioral therapy for insomnia (CBT-I) is the first-line treatment for chronic insomnia recommended in non-pregnant populations by both the American Academy of Sleep Medicine and the American College of Physicians.[25] The lack of significant maternal and fetal risks associated with CBT-I make it the preferred treatment modality in pregnancy as well. The goal of cognitive therapy is to restructure thoughts, emotions, and expectations surrounding sleep to reduce the catastrophizing that is common in insomnia (“if I do not sleep well tonight, I will be a train-wreck tomorrow”), which puts undue pressure on the patient to try to sleep and by increasing stress on the patient to try to sleep and by increasing stress tends to perpetuate the insomnia. Cognitive therapy also can help the patient to adjust habits that stand in the way of getting quality sleep.

Keeping a regular wake time to avoid sleeping in late on bad nights and avoiding napping are other key factors that help build sleep drive and improve the likelihood of falling asleep more quickly on subsequent nights. Relaxation techniques such as meditation and biofeedback can also be implemented to help the patient eliminate activating thoughts and worries at bedtime. Telehealth options have become more common, and studies show telehealth-delivered CBT-I is equally effective to traditional face-to-face session.[26]

Pharmacologic Treatment: In patients who fail or are unwilling to pursue CBT-I, pharmacologic treatment can be considered. As in all cases of medication administration in pregnancy, it is appropriate to start at the lowest acceptable dose and use only as needed. In general, we recommend avoidance of common herbal or "natural" remedies touted as insomnia treatments, such as valerian, tryptophan, and melatonin, due to both an absence of evidence for efficacy as well as safety.[27] Doxylamine, a first-generation antihistamine, is a reasonable over-the-counter (OTC) option to treat insomnia.[27] Although evidence of efficacy is weak, there is strong evidence for its safety. If used, dosing should be should not go above 25 mg at the bedtime given evidence of not additional benefit beyond this dose.

If a prescription sleep aid is felt necessary due to the severity of symptoms, we would recommend either doxepin or zolpidem. Both have strong clinical trial evidence of efficacy in non-pregnant populations and substantial clinical experience of safety to pregnancy.[28] Doxepin is a tricyclic antidepressant with strong anticholinergic properties and so dry mouth is a common side effect. For use in insomnia, there is no evidence of additional benefit with dosing above 6-mg at bedtime, but cost considerations make 10-mg a commonly used dose. In women who choose to breastfeed, doxepin use should be stropped postpartum because active metabolites in breast milk raise the risk of infant sedation. Zolpidem, a benzodiazepine receptor agonist, is another effective insomnia therapy. The risk of tolerance is relatively low, and although dependence does occur, abrupt cessation of zolpidem typically results in a few nights of rebound insomnia. Dosing should not exceed mg at bedtime (or 6.25-mg of the extended-release formulation) due to evidence of neurocognitive deficits the next morning in women receiving higher doses. Zolpidem is considered safe for use during breastfeeding because it is present only in low concentrations in breast milk.[29]

Other medications used are: eszopiclone, triazolam, temazepam, suvorexant, daridorexant and lemborexant. All pharmacologic sleep aids can cause somnolence and fatigue. Most of these have no human pregnancy studies available. In the general population, treatment of insomnia reduces risk of incident or recurrent depression, raising the possibility that insomnia treatment in pregnancy might reduce risk of postpartum depression.

RESTLESS LEGS SYNDROME (RLS)

Restless legs syndrome (RLS) is a disorder characterized by an irresistible urge to move the legs. The discomfort can be difficult to describe and can be reported as a need to move, tenseness, creeping or crawling feeling, and occasionally, as a pain. The discomfort arises during periods of inactivity and worsens if forced to remain immobile. Occasionally, symptoms can also occur in the arms. Key features of RLS include worsening symptoms when sitting or lying down, worsening in the evening, and rapid improvement with movements, brief, repetitive muscle contractions during sleep causing twitches or jerks in the extremities, can be noted by the bed partner of patient with RLS. Although symptoms of RLS during the day can often be controlled by simply getting up and walking, RLS can interfere with the ability to fall asleep or remain sleep at night. Patients suffering from RLS frequently complain of lower sleep quality and prolonged time to fall asleep.[30]

Prevalence: The prevalence of clinically significant RLS in adults is estimated to be 2 – 3%.[31] Pregnancy confers a two-fold to three-fold increase in higher prevalence.[31] RLS can first appear during pregnancy. Some studies have shown that RLS prevalence in the first trimester is 8% and increases to around 16% in the second trimester. By the third trimester the prevalence is as high as 22 – 32%. Postpartum prevalence then drops to 4%.[32] RLS resolves soon after delivery in more than 50% of pregnant patients, typically within 1 month. In those with persistent RLS, symptoms typically continue to improve over the subsequent 6-12 months. Persistent symptoms are most likely in those who had RLS before pregnancy or with a strong family history.

Risk Factors: RLS has a strong family aggregation. Genome-wide association studies have identified numerous risk alleles, many of which are related to iron or dopamine metabolism. Iron deficiency in one of the strongest modifiable risk factors in the development of RLS. The pathophysiology behind this is incompletely understood but is likely related to its role in dopamine synthesis. Dopamine is a key neurotransmitter in the basal ganglia regulating motor activity and movement. Low iron stores in the central nervous system are observed in those with RLS symptoms in these patients.[33]

Central nervous system (CNS) iron deficiency can occur in patients who are not anemic and is often seen in patients with RLS without comorbid anemia. Cerebrospinal fluid (CSF) levels of iron and ferritin are lower in patients with RLS compared with those without RLS; differences in blood iron measures are less distinct, suggesting that a defect in transport to CNS may be contributing to RLS in at least some patients. Iron supplementation can improve or prevent RLS are found to have lower adherence to prenatal vitamins than their non-RLS-affected counterparts.[34]

Medications and other risk factors: medication classes that exacerbate RLS include neuroleptics (because they interfere with dopamine signaling) such as olanzapine, quetiapine, risperidone, and lithium, as well as antiemetic medications with antidopaminergic activity such as metoclopramide, promethazine, and prochlorperazine. Antihistamines that block H1 receptors such as doxylamine, diphenhydramine, and hydroxyzine also are notable for exacerbating RLS.

Another important class of drugs that can worsen RLS symptoms are those that act as serotonergic agonists. This includes selective serotonin reuptake inhibitors, selective norepinephrine reuptake inhibitors, and tricyclic antidepressants. End-stage renal disease and in particular dialysis dependence is a strong risk factor for RLS, but some research indicates it may also be a risk factor for comorbid RLS. Excessive alcohol, nicotine and caffeine use may contribute to RLS severity.

Adverse Pregnancy Outcomes

A recent meta-analysis reported that the most consistent associations were observed between gestational RLS and increased risks of gestational hypertension, preeclampsia, and peripartum depression. There were mixed findings for cesarean delivery, preterm birth and low birth weight, with majority reporting no association with gestational RLS. It is not associated with postpartum hemorrhage, gestational diabetes, fetal distress, or low Apgar scores.[34,35]

Evaluation and Management

RLS is a clinical diagnosis based on a detailed and comprehensive history, physical examination, and limited laboratory work. Subjective symptom severity, relevant history, and clinical findings should be used to guide work up such that symptoms that cause significant distress, or disturbance with a major area of functioning warrant work-up and treatment. History regarding sleep schedule and evidence for any comorbid sleep disorders (most notably OSA) should also be obtained as well as alcohol, smoking and caffeine use. RLS can co-exist with other disorders. In particular, peripheral neuropathy is a risk factor for RLS and so it is important to consider the possibility of both disorders coexisting and requiring management.[36]

Differential Diagnosis

Condition	Distinguishing Features
Positional discomfort	Transient discomfort due to position that resolves with simple positional change.
Sleep related nocturnal leg cramps (Charlie horse)	Spontaneous involuntary muscle contractions, often firm, palpable, and painful, improves slowly with stretching.
Akathisia	Intense sensation of inner restlessness and urge to move; can occur at any time of day; does not improve with movement, usually associated with neuroleptic use.
Hypnic jerks (sleep starts)	Sudden, benign, brief, involuntary muscle contractions and leg movements, typically not associated with discomfort or pain; occurs right at initiation of sleep.
Habitual foot tapping	Voluntary, easily controlled movements; can occur at any time of day; does not interfere with sleep onset or quality of life.
Plantar fasciitis	Inferior foot pain adjacent to the heel due to plantar fascia inflammation; worse on awakening, especially with initial ambulation.
Peripheral neuropathy and radiculopathy	Pain, numbness, or weakness in distal extremities; often due to nerve damage; may have abnormal neurologic examination results; abnormal neurodiagnostic test results.

Table 2. Differential diagnosis of restless legs syndrome (RLS) in pregnancy.

Treatment

A proposed management of RLS in pregnancy is outlined in table 3 below. The first step to RLS symptoms management includes education on the syndrome and its natural history during pregnancy. Exercise and stretching interventions have the most evidence as initial non-pharmacological management of RLS in pregnancy. Starting measures should include recommendations for a moderate level of exercise, such as yoga or walking, on a daily basis. Patients should be instructed that prolonged immobility can trigger or worsen RLS, and so even minimal activity should be attempted unless clinical contraindications exist. Massage also be used to reduce RLS symptoms during pregnancy.[37] In those who cannot exercise, pneumatic compression devices worn for an hour or more each day can improve RLS syndrome without significant risk.

Patients with RLS symptoms that are adversely affecting quality of life should be assessed for removal of offending substance or medications. Antidepressants, anti-dopaminergic, centrally active antihistamines, and antiemetics are frequently prescribed. These medications should be weaned off and discontinued if possible. In patients who require pharmacologic treatment for nausea and vomiting, our recommendation is to substituting ondansetron, which does not exacerbate RLS, for anti-dopaminergic agents such as metoclopramide, promethazine, or prochlorperazine. Bupropion can also be used as it is not associated with birth defects.

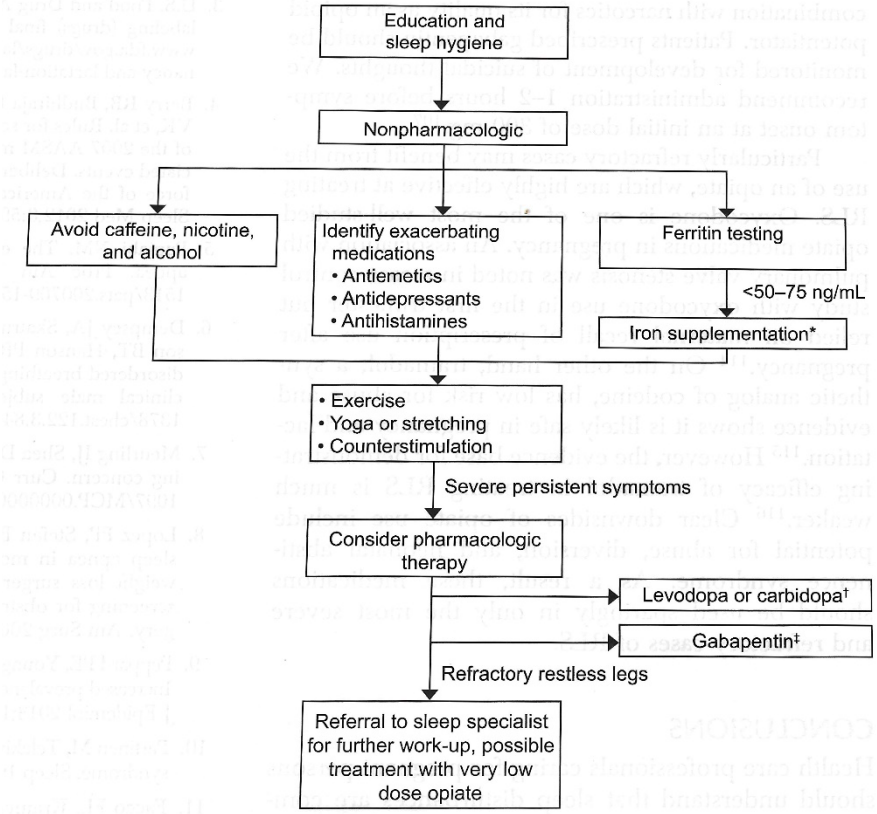

Table 3. Restless leg syndrome – suggested management algorithm
*Oral iron or intravenous iron infusions for severe symptoms.
†Levodopa or carbidopa should be used sparingly and promptly discontinued on delivery to avoid augmentation.
‡Gabapentin is an option with less risk of augmentation; however, there are fewer safety data available than for levodopa or carbidopa.

In those patients who have evidence of iron deficiency anemia, iron supplements should be initiated. Evidence for benefit of iron supplementation is strongest in those with serum ferritin levels lower than 50 ng/mL. Oral iron supplementation with 65mg elemental iron should be given daily or every other day on an empty stomach if tolerated. If oral supplementation fails to improve RLS symptoms after 6-8 weeks, prescribing intravenous iron should be considered depending on the severity of the symptoms.

Pharmacologic treatment should be considered in patients without iron deficiency who have moderate-to-severe distress due to RLS symptoms that do not respond to behavioral interventions. Although the FDA has approved only four drugs for management of RLS (pramipexole, ropinirole, rotigotine and gabapentin enacarbil), additional options that are frequently used off-label for RLS based on available general efficacy data as well as safety data in this target population.[38] Dopaminergic medications should be considered as first-line of treatment for RLS given their clear efficacy and evidence of safety.[38] Levodopa with carbidopa (100 mg with 25 mg to 200 mg with 50 mg, extended release at night) is dopaminergic agonist

commonly prescribed in pregnancy due to robust evidence of safety in pregnancy.[39] However, the risk of tolerance and augmentation is greater with levodopa/carbidopa than other dopamine agonists such as pramipexole, ropinirole, or rotigotine. Although side effects of most of these are well-tolerated, patient should be monitored for development of impulse control disorders (e.g., online gambling or shopping) while on these medication. Avoid use of gabapentin in patients with history of substance use disorder, because it can be abused on its own or in combination with narcotics for the quality as an opioid potentiator. Patients prescribed gabapentin should be monitored for development of suicidal thoughts. Common recommendation is administration of 1-2 hours before symptoms onset at an initial dose of 300 mg.[37]

In refractory cases opiate can be used, which are highly effective at treating RLS. Oxycodone is one the most well-studied opiate medications in pregnancy. An association with pulmonary valve stenosis was noted in a case-controlled study on maternal recall of prescription use after pregnancy.[40] On the other hand, tramadol a synthetic analog of codeine, has low risk for abuse and evidence shows it is likely safe in pregnancy and lactation. Clear downsides of opiate use include potential for abuse, diversion, and neonatal abstinence syndrome. As a result, these medications should be used sparingly in only the most sever and refractory cases of RLS.

Summary

Obstructive sleep apnea, insomnia and restless leg syndrome are the most common sleep disorders seen in pregnancy, and data suggest that they may be associated with an increased risk of adverse pregnancy outcomes. Regardless of their potential influence on pregnancy outcomes such as gestational diabetes and preterm birth, recognizing, evaluating, and treating these conditions in pregnancy is critical for some patients because they are associated with poor sleep quality, impaired daytime functioning, and reduced quality of life. Many treatments and medications used outside of pregnancy can be continued or initiated during pregnancy and lactation, though safety data on some newer pharmacologic treatments are limited. In complex cases, an interdisciplinary approach involving the obstetrician, maternal-fetal medicine subspecialist, and a sleep expert (e.g., neurologist, pulmonologist, or psychiatrist with a specialty in sleep) should be considered.

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