

ASTHMA DURING PREGNANCY



What you need to know about asthma and your changing body.

About Pregnancy and Asthma

Pregnancy is regarded as a miraculous event, a time when a woman realises the capacity for love, anticipates the changes for her future and feels the privilege of carrying a new human being.

When illness takes away from this joy, pregnancy can start to feel hard to bear. To add to all the other normal uncomfortable symptoms an expectant mother experiences, dealing with asthma can create worry for mom and her baby's health.

As with life before pregnancy, the main aim is for an asthmatic mom to stay well controlled, to monitor how she is feeling and to be sure to use the correct therapy to ensure good health for herself and her unborn foetus¹.

Changes in the body during pregnancy

Many physiological changes take place during pregnancy. Most notably are the hormonal changes that occur to accommodate mom's body for the growing foetus and for birth. Some changes appear as external physical changes such as weight gain and an expanding belly and some present as internal changes such as an enlarged uterus and widening of the pelvic area. Symptoms commonly experienced during pregnancy are morning sickness, fatigue, nausea and lower backache. Heartburn and constipation are also very common ailments during pregnancy².

Many women notice a change in their breathing ability and may feel short of breath.

This may be due to changing hormones, as well as the growing uterus and changes to the demands of the heart. Pregnancy leads to increase in use of oxygen to provide for an increase in the maternal metabolic rate³. Some moms start noticing the change as early as the first trimester and it becomes more obvious in the second and third trimester. When a mother suffers from asthma, she may feel concerned that her asthma is flaring up when she experiences shortness of breath. It is important to ensure that regular respiratory check-ups are performed to ensure that the use of her medication is providing optimal control and for peace of mind.

Effects of asthma in pregnancy

Asthma is a chronic illness that can create complications in a substantial number of pregnancies and produce negative effects on pregnancy outcomes if poorly controlled. If asthma is well controlled during pregnancy, there may be very little noticeable effects or risks of asthma related complications⁵. When asthma is poorly controlled, and mom is not using her prescribed medication correctly, the health of baby and her own health could be at risk. There may be an increased risk of experiencing the following problems⁴:

- Restrictions in the growth of the baby
- Premature birth
- The need for a caesarean section
- Preeclampsia, a pregnancy related condition where high blood pressure and damage to another organ system, most commonly the kidneys is experienced.

How pregnancy may affect asthma

Pregnancy can affect asthma in different ways from one person to another. Evidence from various studies suggest that during pregnancy 33% of patients' asthma deteriorates, 33% stays the same and 33% experience an improvement in asthma, making it very changeable from one woman to the next⁴.

Any potential asthma exacerbations (attacks) are more likely to occur between weeks 24 and 36 of pregnancy, the two main reasons for these being, respiratory viral infections and mom not adhering to the use of inhaled steroids. Women with severe asthma are more likely to experiences infections of the respiratory or urinary tract, than women who experienced mild or no asthma⁴.



Diagnosis and management of asthma in pregnancy

Whether a woman is pregnant or not, the diagnosis of asthma is no different and she is assessed using the same guidelines as for those who are not pregnant⁵.

As with diagnosis of asthma in men and women who are not pregnant, the severity of asthma needs to be determined. Knowing the severity of her asthma, an appropriate treatment plan is then selected by her doctor to ensure that mom is well controlled throughout her pregnancy.

As asthma is a condition that is characterized by chronic airway inflammation, the main symptoms of asthma are shortness of breath or breathlessness, air flow limitations when breathing out, a tight feeling in the chest, wheezing and a cough that may change in intensity and over time⁶. During her routine check-ups, the doctor will need to assess how she is feeling, possibly adjust her treatment plan and then review the response after a few days if changes have been made⁶.

Some aspects a doctor may consider when managing the treatment of an asthmatic mom⁷:

- Ensure that control is maintained throughout pregnancy
- Treat allergic rhinitis and gastric reflux adequately
- Check lung function at least monthly
- Encourage smoking cessation if mom is a smoker
- Treat mom as a team (GP, obstetrician and pulmonologist provide feedback to each other)

If asthma is not well controlled, the doctor may even watch mom use her inhaler to make sure she is using it correctly as this could be affecting her ability to remain breathing freely. Incorrect use of an inhaler can lead to the asthma medication not reaching the targeted area in the airways.

Looking after herself and keeping up a sensible lifestyle to making sure her usual asthma triggers are not present in her environment can go a long way to avoiding an asthma attack. Common triggers are animal dander, tobacco smoke, dust mites, cockroach antigens, pollen and mold³.

What to do in the case of an asthma attack

Prevention is always the first step in treating asthma and ensuring good control is imperative.

An asthma attack can be described as a sudden increase of asthma symptoms. During an asthma attack, the muscles that surround the bronchial tubes constrict, narrowing the air passages, making it difficult to breathe.

Other common symptoms are wheezing and a rattling sound in the chest. An asthma attack can affect the wellbeing of mother and baby increasing the risk of hypoxemia which is low levels of oxygen in the blood⁴. Recognising the early signs of declining asthma control is crucial so that home treatment can be started to avoid lowered levels of oxygen in the blood in mother and baby.

Patient education is very important in moms who have any chronic condition. Her treating doctor plays a big role in ensuring mom knows everything she needs to know about her asthma at the beginning of her pregnancy. If she is unsure about anything relating to her respiratory condition, she should ask for more information³.

When mom starts experiencing the signs of an asthma, her personalised treatment options should be applied and if this is not helping to relieve her symptoms within a short time frame, she should seek medical care as soon as possible. Hospitalisation is considered if symptoms are extreme and when she is not obtaining relief³.

Management of asthma during labour and delivery

Asthma medication should not be discontinued during labour and delivery and can be adjusted as required⁴.

Some medications such as those used in induction may influence asthma symptoms and mom will therefore need to be monitored continually during labour and delivery.

Management of asthma after baby is born

Asthma medication will need to be continued after birth and during breastfeeding and even though small amounts of medication is excreted in the breast milk, most asthma treatments are considered suitable for use during breastfeeding⁴.

Conclusion

Asthma may be influenced by pregnancy however if mom is educated about how to avoid triggers, how to use her medication effectively and stays on her treatment plan and engages with her doctor regularly, her pregnancy could be a time of enjoyment with excited expectation for her new journey.

Please note this is an education information leaflet only and should not be used for diagnosis. For more information on Asthma in Pregnancy, consult your healthcare professional.

References: 1. Asthma and Pregnancy Report. NAEPP report of the Working Group on Asthma and Pregnancy: Managing Asthma During Pregnancy: Recommendations for Pharmacologic Treatment. Bethesda (MD): US Department of Health and Human Services; 2005. Publication #NH05-5236. 2. <https://americanpregnancy.org/your-pregnancy/7-common-discomforts-pregnancy/> 3. Hardy-Fairbanks AJ, Baker ER, Asthma in Pregnancy: Pathophysiology, Diagnosis and Management, Obstetrics and Gynaecology Clinic of North America 37 (2010) 159–172 4. Rey E, Boulet L-P, Pregnancy Plus: Asthma in Pregnancy. BMJ 2007;334:582-5 5. Schatz M, Dombrowski MP. ACOG Practise Bulletin. Clinical Management Guidelines For Obstetrician–Gynecologists Number 90, February 2008 6. Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention 2019. Available from: www.ginasthma.org 7. Namazy, JA, Schatz M. Current guidelines for the Management of Asthma During Pregnancy Immunology and Allergy Clinics of North America 26 (2006) 93-102

