

Bronchial asthma in pregnancy

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Short communication

Bronchial asthma is a very common breathing disorder and is most common chronic respiratory problem of pregnancy affecting upto 8 to 13% of pregnant females.¹ There is ample published data that shows that patients with asthma are undertreated during pregnancy even if they were on adequate medications prior to conception. Among women who report having asthma prior to conception only 63% to 76% were on asthma medications during their pregnancy.² This change in medication pattern can be explained by change in disease severity during pregnancy with 45% of females experiencing worsening of symptoms and upto one third of females reporting improvement in their asthma symptoms.^{2,3} One important factor is physician concern for safety of medications and lack of awareness of guidelines. The other important factor is apprehension of the female for use of medications during pregnancy. Guidelines recommend providing written action plan and use of preventer medicines as indicated for any other adult with asthma.³ The asthma medications are safe during pregnancy and are FDA pregnancy category B and C. Upto 45% of females get moderate to severe asthma exacerbation during pregnancy.² Exacerbations are more severe and more frequent in patients with uncontrolled or partially controlled asthma. Pregnant females have higher chances (1.3%) of requiring hospitalization for asthma exacerbation than non-pregnant females (0.8%).² Bronchial asthma exacerbation increases the risk of perinatal complications with females with moderate to severe asthma having increased risk of preterm delivery (RR- 1.54) and Low birth weight (RR-3.02).^{4,5} Oral steroid use for asthma exacerbation management is associated with significant risk of Preterm delivery (RR-1.51) and low birth weight (RR-1.4) infants.⁵ Babies of asthmatic mothers are also more likely to have congenital anomalies.^{6,7} A recent systematic review and meta-analysis indicated that optimal disease control may reduce these adverse perinatal outcomes. So, proper and timely management of asthma is important in pregnancy to reduce these risk factors.

The goal of management in pregnancy is a safe and healthy mother and child, to maintain normal activities, to prevent chronic day and night symptoms and prevention of exacerbations with medicines that have no or minimal side effects. We also try to prevent fetal hypoxia by preventing maternal exacerbations. A number of pregnancy associated conditions contribute to or modify severity of disease including GERD, nasal congestion and hormonal factors. Since pregnancy is associated with physiological dyspnoea, a fall in FEV₁ is better predictor of disease worsening than loss of symptom control.⁸ Regular review of the patients should be done, preconception and every 4weeks during pregnancy to monitor progress of disease and to maintain it under control and also to assess any associated condition which may cause asthma exacerbations. Patients with mild intermittent symptoms are treated with short acting B₂-agonists (SABA) as reliever medications. Inhaled corticosteroids (ICS) are used for persistent asthma as controller medication. Inhaled steroids have been proven to be safe during pregnancy.^{3,9} It is recommended to continue ICS medications in dose that was effective in controlling asthma prior to conception. Data regarding safety of long acting B₂-

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agonists (LABA) is still under study.^{10,11} But guidelines say that for baby and mother treating asthma is far more beneficial than the risks associated with use of drugs.³ So proper control of asthma is key to safe mother and child in pregnancy.

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Conflict of interest

The author declares no conflict of interest.

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