

**DRUG PROFILE****MEDICATIONS TO MANAGE ACUTE EXACERBATION OF ASTHMA IN CHILDREN**

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**Abstract:** *Acute exacerbation of asthma is one of the common pediatric emergencies that require early identification and prompt management. There are number of reliever medications that are recommended for use during these episodes, of which short acting beta-2 agonists and systemic corticosteroids are the established first line agents. When these medications fail, second line agents should be administered without delay since risk of mortality is high once the child progresses to respiratory failure. Careful dosing of medications and monitoring for side effects are important for successful management.*

**Keywords:** *Acute asthma, Children, Beta agonists, Corticosteroids, Anticholinergics, Magnesium sulphate, Aminophylline*

**Points to Remember**

- *Treatment of acute asthma exacerbations should target the bronchospasm as well as the underlying airway inflammation.*
- *Short acting beta-2 agonists and corticosteroids are the first line medications used.*
- *Whenever possible pressurized metered dose inhaler is the ideal device to deliver beta-2 agonists and in severe exacerbations when nebulizer is used, oxygen must be supplemented.*
- *Early initiation of systemic steroids reduces the need for hospitalization.*
- *Ipratropium, an anticholinergic bronchodilator can be considered along with short acting beta-2 agonists to improve their efficacy.*
- *Magnesium sulphate is more recognized as a second line agent in severe asthma exacerbation not responding to first line agents.*

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