

Asthma: What do sex and gender have to do with it?

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Asthma is a common clinical syndrome of the respiratory tract that affects more than 300 million people worldwide. It is characterized by episodic reversible airway obstruction that may lead to symptoms of wheezing, coughing, and shortness of breath. In childhood, asthma is more common in boys than in young girls. However, during adolescence, this prevalence equalizes, and by adulthood, there is a female predominance. The severity of asthma is also greater in women than in men, and women are more prone to develop corticosteroid-resistant or “hard-to-treat” asthma. Although mechanisms underlying these sex differences are poorly understood, sex hormones, such as estrogen, have been suggested to contribute to the disease outcome in women. This lecture will first review the clinical and epidemiologic data concerning gender differences in asthma, and then will examine the literature regarding its potential mechanisms.