CHAPTER 3
Corticosteroids in Pediatric Asthma

Henry A. Wojtczak and Jeffrey S. Wagener*

Department of Pediatrics, The Children's Hospital and University of Colorado Health Sciences Center, Denver, Colorado, USA

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* Author for correspondence.
1. Introduction

Asthma is a chronic lung disease characterized by mucosal and submuco­sal edema of the bronchi and bronchioles, thickening of the basement membrane, intraluminal mucus plugs, and smooth muscle hyperplasia [1]. In recent years our view of the underlying pathophysiological mechanism involved in asthma has changed with the knowledge that inflammation plays a pivotal role. Current scientific information supports the concept that asthma, even in mild cases, is an inflammatory disease with resulting airway hyperresponsiveness and airflow limitation [2]. The recent increase in asthma morbidity and mortality is of great concern in light of scientific advances that have improved our understanding of asthma and provided promising new therapies [3]. This rise is occurring despite an increase in prescribed asthma therapy, suggesting that currently available therapy is inadequate or is not being used optimally.

Since being introduced nearly 50 years ago, corticosteroid medica­tions have played an important role in treating chronic asthma. Initially, systemic steroid use was reserved for the most severe cases, or for acute exacerbations, and was limited by unacceptable systemic side-effects. The development of inhaled beclomethasone dipropionate in the early 1970s added an effective topical corticosteroid to the treatment of chronic asthma [4].