

The Effects of Daily Corticosteroids on Children with Asthma

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Purpose

The purpose of this poster is to review current literature on the effects of daily use of corticosteroids in children with asthma.

Objectives

1. Identify positive and negative side effects of the daily use of corticosteroids.
2. Describe the effects of increased corticosteroid dosage related to exacerbation of asthma in children.

Introduction

Childhood asthma is the most common serious disease seen in childhood. The use of inhaled corticosteroids (ICS) is one of the first line medications used for the treatment of childhood asthma.

Inhaled corticosteroids (ICS) is the number one drug of choice to help prevent asthma exacerbation.

Taking any medication daily has the potential to cause side effects whether they are positive or negative (Zhou et al., 2018.)

There are several positive outcomes due to the use of ICS. Studies show that the length of hospital stay for an asthmatic child taking daily ICS is significantly shorter. Additionally, the child receiving daily ICS therapy is less likely to be admitted to the hospital.

Methodology

There are eleven articles that have been collected to review the literature regarding the effects of daily ICS. Several of those articles focus on the negative side effects of taking ICS daily. The other articles concentrated on the overall long-term benefits of taking ICS daily. All of the collected literature agreed that the benefit of using ICS to reverse airway remodeling and decrease the potential for asthma exacerbation is worth the risk.

Literature Review Findings

The research concluded that there were no significant benefits related to asthma from taking a high dose versus a low dose of ICS (Jackson et al., 2018.) Increasing the dose of children's daily ICS did not shorten the length of exacerbation.

The increased dosing did cause some negative side effects such as adrenal insufficiency, oral candidiasis, and growth delays (Hossney et al., 2016).

People who were consistent with taking their daily ICS had less prolonged and severe exacerbations (Zhou et al., 2018).

The other article conducted a research study to show the effectiveness of the ICS through a survey of admission rates and overall hospital stay. The daily use of ICS decreases admission cost and the length of the hospital stay related to asthma exacerbation (Razi et al., 2015).

Conclusion

Daily use of ICS aids in reverse airway remodeling and decreases the severity of asthma exacerbation; however, this is dose dependent.

The literature suggests that once a patient is on a therapeutic maintenance dose of ICS, there is no reason to increase the dosage when experiencing asthma related symptoms.

Increasing ICS steroids dosage at the sign of a possible asthma exacerbation does not improve the severity or shorten the asthma exacerbation.

Taking a daily ICS as prescribed can potentially decrease asthma complications.

Significance to Nursing

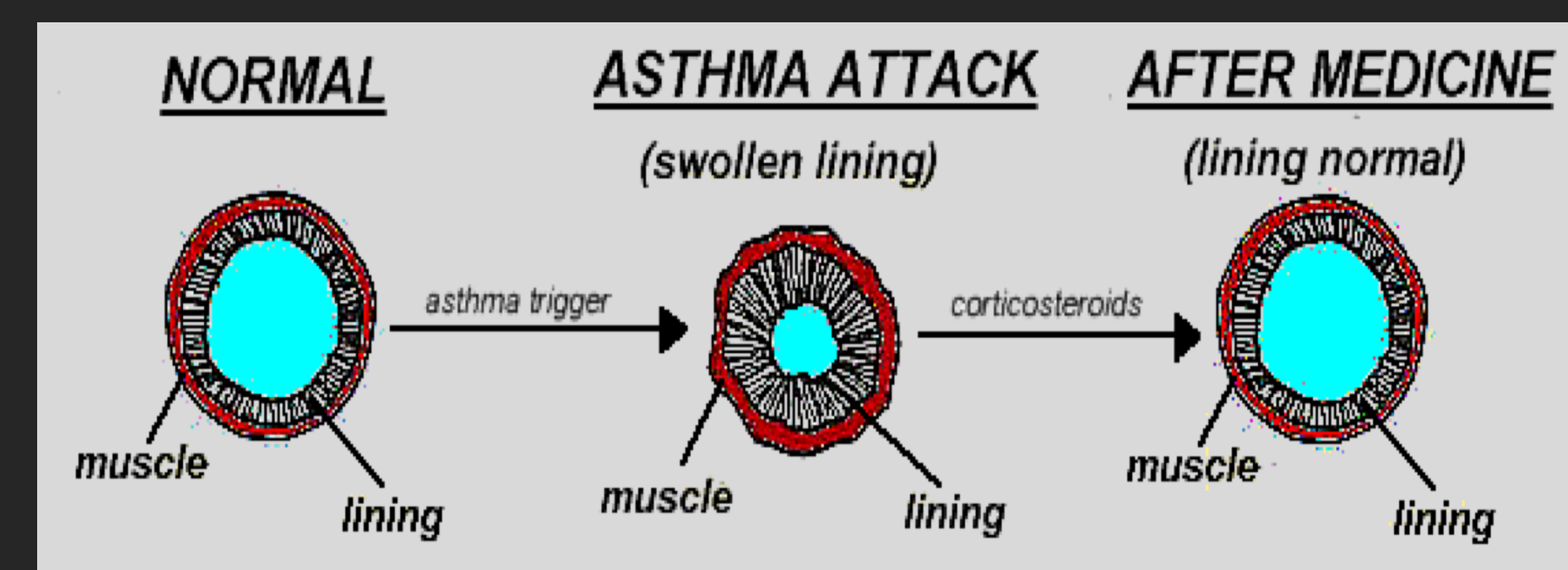
This is relevant to advanced nursing practice because it will help the provider understand that daily ICS are beneficial to asthmatics but not sporadic wheezes. It is important for the provider to understand and to educate patients on the benefits of daily compliance of taking ICS.

This study is relevant to advance practice because the knowledge learned could decrease admission rates, time in hospital, and overall healthcare costs spent on treating asthma.

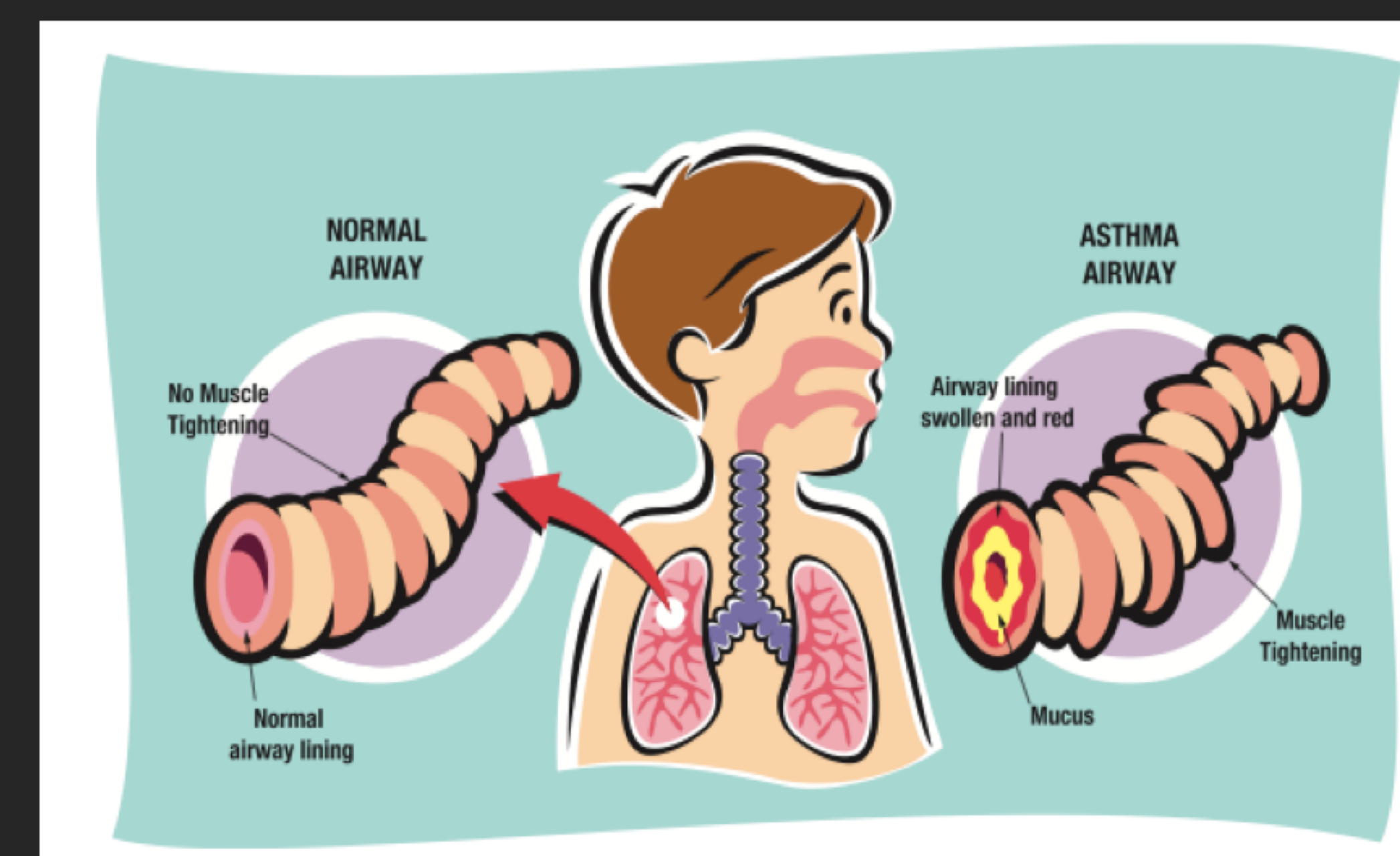
This research allows the provider to educate the people taking daily ICS about how daily use can impact their future height as an adult.

References

For a complete list of references please email the author aevans154766@troy.edu



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