

For the Patient

The full report is titled “Association between elevated serum triglycerides and asthma in patients with obesity: an explorative study.” by Cathelijne M. van Zelst, Geertje M. de Boer, Yasemin Türk, Astrid van Huisstede, Johannes C. C.M. in 't Veen, Erwin Birnie, Bianca M. Boxma-de Klerk, Gerdien A. Tramper-Stranders, Gert-Jan Braunstahl. The report appears in the May-June 2021 issue of *Allergy Asthma Proceedings* (volume 42, pages e71–e76)

For the Patient is provided to physicians so that the patients can better understand the language of modern medicine.

For the Patient is written by the editors (Bellanti, JA and Settignano, RA) and provided to practitioners so that patients can better understand the usefulness of new information resulting from medical research.

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SERUM TRIGLYCERIDES AND ASTHMA IN PATIENTS WITH OBESITY

Obesity is not only associated with a number of general health conditions but there is a strong connection between obesity and developing asthma and worsening and poor control of symptoms. Studies have shown not only that ~38% of adults with asthma are obese, compared to only 26% in adults without asthma but also that a correlation exists between weight loss and improvement of asthma symptoms. Although the precise mechanism for this relationship is unknown, obesity can reduce lung volume, affect blood volume to the airways and even affect how well a patient responds to asthma medication. Another finding observed in obese patients with asthma that has been less well-studied is an elevation of serum triglycerides. In a report in this issue of the *Proceedings*, by van Zelst and coworkers from the Department of Pulmonology, Franciscus Gasthuis en Vlietland, Rotterdam, the Netherlands, the relationship of the higher prevalence of lipid levels in obese asthmatic patients is examined.

Why Did the Researchers Do This Particular Study?

The primary goal of the study was to determine the relationship of elevated lipid levels in obese patients with asthma

Who or What Was Studied?

This explorative study included 96 asthma patients with asthma and 45 controls. All study subjects participated in one of three asthma studies two of which included only subjects with obesity.

How Was the Study Done?

Serum lipid concentrations and quantitative blood levels of neutrophils and eosinophils were examined in patients with asthma and controls within a wide range of body mass index (BMI), a quantitative measure of body fat based on a person's height and weight.

What Were the Limitations of the Study?

The report emanates from a single center and the study asthma subjects and controls were mainly women, which may have influenced the results.

What Are the Implications of the Study?

The study shows that levels of triglycerides and markers of inflammation, such as eosinophils, are elevated in asthmatic patients with obesity, compared to controls with obesity and independently of medications used to treat asthma. This may suggest that elevated triglycerides are as yet another unrecognized trait that contributes to the development of asthma, especially since triglycerides are not elevated in obese controls without asthma. The study provides additional support for recommending weight reduction and serum lipid treatment in the management of obese patients with asthma. □