



THYROID CANCER

Low levels of circulating adiponectin are an independent risk factor for papillary thyroid cancer

BACKGROUND

Obesity has been shown to be a risk factor for some types of cancer. Adiponectin is a protein produced in fat cells that is secreted and circulates in the blood. Low circulating levels of adiponectin has been associated with an increased risk of certain types of cancer while high levels seem to decrease the risk for cancer. This study evaluated adiponectin levels as a risk factor for papillary thyroid cancer.

TITLE

Mitsiades N et al. Circulating Adiponectin Is Inversely Associated with Risk of Thyroid Cancer: In Vivo and in vitro Studies. *J Clin Endocrinol Metab.* September 21, 2011 [Epub ahead of print]. doi: 10.1210/jc.2010-1908.

SUMMARY OF THE STUDY

Adiponectin levels were measured in 175 patients with thyroid cancer and compared to those of 107 individuals

without thyroid cancer. Thyroid cancer patients had significantly lower circulating adiponectin levels than those without cancer. Those individuals with the highest circulating adiponectin levels had a significantly lower risk of developing any type of thyroid cancer.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study shows that lower levels of circulating adiponectin are associated with an increased risk of developing thyroid cancer and identifies low levels of adiponectin as a possible marker for increased risk of thyroid cancer.

— Frank Cranz, MD

ATA THYROID BROCHURE LINKS

Thyroid Cancer: http://thyroid.org/patients/patients_brochures/cancer_of_thyroid.html

ABBREVIATIONS & DEFINITIONS

Papillary thyroid cancer: the most common type of thyroid cancer.

Adiponectin: a protein that is produced by fat cells and secreted into the circulation

Thyroidectomy: surgery to remove the thyroid gland. When the entire thyroid is removed it is termed a total thyroidectomy. When less is removed, such as in removal of a lobe, it is termed a partial thyroidectomy.