Letters to the Editor


Letter

Julie A. Britton, Susan L. Teitelbaum, and Mary S. Wolff
Divisions of Epidemiology [J. A. B., S. L. T.] and Environmental Health Science [M. S. W.], Mount Sinai School of Medicine, New York, New York 10029

We commend Schoen et al. (1) on their well-conducted study, in which the authors conclude there is no association between adiposity and either IGF-I or IGF binding protein-3, although there was a strong correlation between visceral adipose tissue and insulin level. It has been suggested recently that the relationship between adiposity and IGF-I may be an inverted U, i.e., nonlinear (2). Inspection of Table 3 in Schoen et al. (1) suggests that visceral adipose tissue and some of the IGF-related measures have an inverted U-shaped relationship. If this were so, it is not surprising that both the correlation coefficients and the trend tests were not statistically significant, because both tests assume a monotonically increasing or decreasing trend. Given the increasing attention to the role of the IGF family in cancer etiology (3), it would be informative to know whether this purported inverted U-shaped relationship exists in the Schoen et al. (1) study population. Understanding how adiposity and its characteristics influence the levels of the IGF family members provides much needed insight regarding potentially modifiable cancer risk factors.

References

Reply

Joel L. Weissfeld, and Robert E. Schoen
Department of Epidemiology and Division of Gastroenterology and Hepatology, University of Pittsburgh, Pittsburgh, Pennsylvania 15213-5582

Global tests of general association do not show statistically significant associations between sex-specific VAT quartile and IGF measures, dichotomized as sex-specific median cut-points. Scatter plots do not provide strong evidence for an inverse U-shaped association between IGF-I and VAT, in men (Fig. 1) or women (Fig. 2). The elevated odds of high median IGF-I in women with second quartile VAT relative to women with first quartile VAT probably represents a chance occurrence related to the specific cut-points chosen to convert variables (e.g., IGF-I and VAT) measured on an interval scale into analytic variables measured on an ordinal scale.

Received 1/6/03; accepted 1/15/03.
1 The abbreviations used are: IGF, insulin-like growth factor.

Received 2/28/03; accepted 3/19/03.
1 The abbreviations used are: VAT, visceral adipose tissue; IGF, insulin-like growth factor.

Received 3/16/03; accepted 3/26/03.
Fig. 1. Association between IGF-I and VAT, in men (n = 267), with least square quadratic regression curve (F value = 0.28, 2 degrees of freedom; P = 0.76).

Fig. 2. Association between IGF-I and VAT, in women (n = 165), with least square quadratic regression curve (F value = 0.59, 2 degrees of freedom; P = 0.56).

Julie A. Britton, Susan L. Teitelbaum and Mary S. Wolff


Access the most recent version of this article at:
http://cebp.aacrjournals.org/content/12/6/586.2

This article cites 3 articles, 1 of which you can access for free at:
http://cebp.aacrjournals.org/content/12/6/586.2.full#ref-list-1

Sign up to receive free email-alerts related to this article or journal.

To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pubs@aacr.org.

To request permission to re-use all or part of this article, contact the AACR Publications Department at permissions@aacr.org.