



A culprit for carcinogenesis hiding in daylight: normal-weight obesity

Osman Cagin Buldukoglu¹ · Serkan Ocal¹ ·
Ayhan Hilmi Cekin¹

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To the Editor,

We read with great interest and congratulate Takaoka et al. on their study entitled “Body mass index and survival among patients with advanced biliary tract cancer: a single-institutional study with nationwide data-based validation” [1]. The results of this well-designed study revealed no association between body mass index (BMI) and survival rates of patients with advanced biliary tract cancers.

High BMI, especially in the range of obesity which is defined as a BMI of equal to or higher than 30 kg/m², can be considered a pandemic disease worldwide with implications on virtually every organ system [2]. Given the wide array of metabolic changes associated with increased body weight, obesity is linked to various disorders ranging from inflammatory-driven diseases to cancers, both as a risk factor and a prognostic determinant [3, 4].

An often overlooked but important aspect of patient evaluation in routine daily practice is the concept of normal-weight obesity (NWO). NWO is defined as the presence of excess body fat in patients within normal BMI range (18.5–24.9 kg/m²) [5]. NWO is associated with chronic disorders such as insulin resistance, dyslipidemia and hypertension and there is growing evidence in the literature regarding the role of increased adiposity on carcinogenesis

[5, 6]. Mechanisms of carcinogenesis related to NWO are proposed to comprise insulin signaling pathways, circulating adipokines, increased estrogen levels and inflammation [6].

In conclusion, the study by Takaoka et al. contributes greatly to an important topic on not only patients with cancer but also general population. Increased awareness of NWO and future studies investigating the role of NWO on disease pathogenesis and outcome in various medical specialties will shed more light on the importance of this clinical entity.

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Declarations

Conflict of interest None.

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✉ Osman Cagin Buldukoglu
cbuldukoglu@hotmail.com

¹ Department of Gastroenterology, Antalya Egitim Ve Arastirma Hastanesi, Gastroenteroloji, Antalya Training and Research Hospital, University of Health Sciences, Varlik Mah. Kazim Karabekir Cad. 07100, Antalya, Turkey

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