

Comment

This issue of "Postępy Nauk Medycznych" focuses on various aspects of obesity. We present empirical papers and conceptual studies with the aim of passing knowledge to doctors, who in their daily practice deal with this complex condition, which impairs health and has serious negative social and psychological results.

The first group of articles consists of empirical studies from centers where patients with morbid obesity are treated daily and where research is conducted regularly. These papers are very interesting and important because they hint at the pathology of obesity, show us its possible health and psychological effects, which can be successfully diminished after body mass reduction. Directions for practicing medical doctors are presented, both in their ambulatory and hospital work.

The first article written by Walicka et al. presents results of their work on gender dependent dimorphism in adipokines levels and its correlations with insulin resistance in extremely obese patients (1). The authors, based on their results, concluded that in extremely obese patients there is a gender dependent dimorphism in adipokines levels and their correlations with insulin resistance. This dimorphism is not fully understood and it might be due to different adipose tissue distribution.

The next article "Nonalcoholic fatty liver disease in patients with morbid obesity" was written by Lisik et al. (2). The aim of this study was to assess the prevalence of nonalcoholic fatty liver disease (NAFLD), biochemical abnormalities accompanying this pathology, as well as the development of diagnostic method allowing the prediction of NAFLD or nonalcoholic steatohepatitis (NASH) among pathologically obese patients. The authors on the basis of their retrospective material with biochemical parameters concluded that NAFLD occurs in most patients awaiting bariatric surgery. These data are very important because logistic regression model that applies biochemical parameters allows prediction of the occurrence of obesity-related histological changes in the liver, without the need for performing the liver biopsy.

The paper written by Dziurawicz-Kozłowska et al. deals with physical, psychological and social functioning of patients undergoing surgical treatment of obesity with the Vertical Banded Gastroplasty (VBG) (3). The paper has been set in the bio-psychosocial health model and it confirms that obesity impacts the patients' psychological functioning. Conclusions state that the VBG surgery is effective in obtaining a body mass reduction, improvement in obese patients' physical and psychological functioning (after 3 months) as well as social functioning (after six months). Such conclusions support the surgical treatment of obesity.

In the next article Kuźmińska et al. based on own material analyzed correlation between BMI (Body Mass Index) and AHI (Apnea Hypnea Index) in patients referred to sleep laboratory by physicians of different specialties because of suspicion of Sleep-disordered breathing (SDB) (4). After polysomnographic evaluation of 960 patients and their antropometric data, the authors concluded that obstructive sleep apnea (OSAS) dominates in the general patients population with suspected SDB and higher AHI is correlated with also higher BMI. Results of this work show that obesity is a main risk of OSA.

The paper by Domienik-Karłowicz concentrated on vascular abnormalities in obese patients (5). According to the recommendations of the European Society of Hypertension and the European Society of Cardiology an increase in intima-media thickness (IMT) is a subclinical surrogate of morphological abnormalities of arterial walls. The aim of this study was to conduct common carotid intima-media thickness assessment in morbidly obese patients as well as to study the influence of bariatric surgery on studied parameter. Conclusions stated that non-invasive assessment of common carotid artery IMT showed unfavorable change in the group of morbidly obese patients in comparison to healthy persons. Weight reduction as a result of bariatric surgery leads to the decrease in IMT as well as beneficial metabolic changes.

In the article "Laparoscopic sleeve gastrectomy in the treatment of obesity" Binda et al. presented own experience based on almost 100 operations using this method over a two-year period (6). Demographic data, parameters of body weight reduction, surgery parameters, complications and resolution of co-morbidities were evaluated. They concluded that Laparoscopic sleeve gastrectomy is an effective weight loss procedure in the majority of patients. Sleeve gastrectomy has beneficial effects on the elimination of obesity-related diseases. This surgery is associated with a relatively low number of complications. In the case of serious complications such as a leak or stenosis long-term treatment at hospital is necessary.

In the first review article authors define obesity and present new data on its epidemiology, as well as discuss social and psychological dimensions of obesity (7). They present arguments for several factors (genetic, hormonal, environmental, and socio-cultural) which play a central role in obesity pathogenesis. This paper is a good introduction to the next article about secondary causes of obesity.

The article by Czerwińska et al. concerns important problems of differential diagnosis and secondary causes of obesity in general practice (8). The authors emphasize that based on clinical picture it is usually possible to

distinguish secondary causes of obesity, but sometimes the signs of secondary obesity are discreet or atypical and laboratory tests, which depend on symptoms, risk factors and index of suspicion should be done. It is important to remember that among obese children and adolescents there are individuals with dysmorphic features, short stature, development or puberty delay and other endocrine abnormalities. These patients should be referred to the specialistic (endocrinology or genetics) clinic.

The article by Walicka et al. deals with obesity as the major determinant of type 2 diabetes presumably through its effect on insulin resistance (9). Physicians should consider weight issues at every stage of treatment type 2 diabetes through the use of appropriate therapy and take care to choose anti-diabetic medication that is weight neutral or produces weight loss.

The article entitled "The link between obesity and cancer" by Wąsowski et al. – reports that clinical and epidemiological studies show a significant association between obesity and several cancers e.g. cancers of the colon, female breast, endometrium, kidney, and esophagus (10). These data and rising worldwide trend in obesity suggest that weight gain may be the largest avoidable cause of cancer in nonsmokers. The overwhelming majority of the data suggests that a combination of factors secreted by the adipocyte with contributions from the secondary effects of obesity such as hyperinsulinaemia and hyperlipidemia lead to an increased incidence of cancer.

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