

REVIEW

Obesity in focus

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Abstract: Obesity has become the most frequent metabolic disease as a result of life conditions and lifestyle which have resulted in a positive energetic balance. However, at the end of the 20th century it reached the dimension of the global epidemic as a result of constantly increasing energy intake without an adequate increase in energy expenditure.

The article describes the 11th International Congress on Obesity which took place in Stockholm in July 2010. The delegates discussed recommended diagnostics and treatments in obesitology. A large number of presentations were focused on nutrition and dietary management. The Congress showed that it is necessary to keep paying obesity due attention. Full Text in free PDF www.bmj.sk.

Key words: congress on obesity, overweight, obesity, dietary management, pharmacotherapy of obesity.

While a few decades ago, obesity was not considered a crucial medical problem, in recent years the situation has been changing rapidly. The International Congress on Obesity (ICO), which took place from 11 to 15 July, 2010 in Stockholm, Sweden documented this very clearly. Though it was already the 11th event in the series of ICO congresses organized by the International Association for the Study of Obesity (IASO), the import which the event has been gaining recently in unprecedented.

As obesity slowly becomes one of the most intricate problems of current Western civilization, the exchange the most up-to-date information on the incidence and prevalence of obesity, possibilities of its prevention, diagnosis and treatment, risk factors of the incidence of this disease, etc., has been felt as imperative by a growing body of specialists. The congress also offered the opportunity to meet in person some of the most renowned specialists from various countries from the five continents and establish cooperation with them.

Due to the large number of participants and presented topics, the congress was divided into five parallel sections. Each section focused on a specific topic. The topics of these sections were: 1) Basic Science, 2) Experimental Medicine and Physiology, 3) Treatment and Comorbidities, 4) Epidemiology, Diet, Activity and Behavior, 5) Public Health and Policy (Prevention/Societal Focus).

The high standard of the congress and the interest of participants in this event can be deduced from the large number of presentations (almost 1,600 papers). Out of the above-mentioned

presentations, 1,300 were posters and about 300 were oral presentations.

The main topics of this congress were an up-to-date situation report about the prevention of obesity and the current possibilities of its pharmacological and surgical treatment. A large number of presentations were focused on childhood obesity.

Dr. Ahrens from the Bremen Institute for Prevention Research, Germany, presented the results of the IDEFICS study in which 16,000 children aged 2–9 years were monitored in eight European countries. The highest prevalence of overweight/obesity was found in Italian children (40 % in boys and 44 % in girls, in contrast to Sweden with only 10 % in boys and 12 % in girls).

Another interesting presentation – the one by Dr. Tremblay from the Children's Hospital in Ottawa - was part of an extensive section: Physical Activity. He compared the prevalence of overweight and obesity in Canadian children in 1981 and at present time. Canadian children are taller, heavier, fatter, wider, weaker and less flexible than a generation ago. These results forecast accelerated non-communicable disease development, increased health care cost, and a loss of future productivity. In my opinion, childhood obesity is a major public health issue as it is associated with premature development of cardiovascular diseases (CVD).

In the Social and Cultural Aspects of Obesity block, Dr. Waga from the Fiji School of Medicine, Fiji, presented a paper on the high prevalence of obesity in male and female adolescents from Tonga. The Pacific Islands have the highest level of obesity in the world. A large person is well respected and well cared for by their family on these Islands.

After the presentations of Dr. Hawkes from Brazil and Dr. Yach from the USA, an interesting discussion arose in the Dietary Management of Obesity program block on the topic of supermarket development strategies. These strategies can influence

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the decisions consumers make about food. The presentation of British authors Onakpoya and Wider on herbal and non-herbal food supplements was also interesting. Literature searches were conducted in five electronic databases to identify all relevant articles. None of the reviews suggested that the food supplements are an adequate treatment for reducing body weight.

Dr. Ellrott from the Institute for Nutrition at the University of Cottingen, Germany, presented the results of a randomized, placebo-controlled trial on the efficacy of dietary supplements and medical devices for weight reduction. All tested non-prescription weight loss products showed no better efficacy than the placebo. Application of a real effective antiobesity agent, a medication with proven efficacy and safety, should be considered instead.

In the section Novel Pharmacological Approaches to Treat Obesity, Dr. Astrup from the University of Copenhagen, Denmark, presented the results of a placebo-controlled, 20-week double blind trial with an open-label orlistat comparator and a 84-week open-label extension investigated weight loss with liraglutide 1.2–3 mg in obese non-diabetic adults. Weight loss from randomization within 104 weeks was greater with liraglutide than orlistat. Liraglutide had a satisfactory safety and tolerability while maintaining significantly higher weight loss than orlistat.

In another paper, the American authors Dunayevich, Ericsson, and Maier presented a combination of naltrexone/bupropion within a double blind, placebo-controlled, 56-week study with intensive behavior modification. This drug combination was generally well tolerated and led to clinically significant weight loss with improvements in cardiometabolic risk markers, weight-related quality of life, and eating control. Other American authors Gadde, Day, and Allison presented a possibility for combined pharmacotherapy. Phentermine/topiramate is a once-day, low-dose, controlled-release combination of two agents with demonstrated weight loss properties. Phentermine/topiramate reduces food intake and potentially achieves greater improvements in weight and cardiovascular risk reduction than a monotherapeutic weight loss agent. The aim of the modern pharmacotherapy of obesity is to help the patients to reduce their weight and to maintain it on a long-term basis or to treat the metabolic disorders which predispose the individual to develop obesity.

The increased number of obese patients also puts the pressure on the drug producers to carry out additional research programmes and experimental and clinical studies with the aim to produce new drugs which will be suitable for the therapy of obesity due to their long-term and safe effects. Because of the multifactorial etiopathogenesis of obesity it can be assumed that each anti-obesity agent can have different effectiveness in different patients

At present, the possibilities of the pharmacotherapy of obesity are quite restricted. New medicaments, namely lorkaserin and cetilistat, are awaited anxiously.

In the section Mechanisms of Action of Bariatric Surgery, the fact was mentioned that the incidence of weight loss surgery in the USA had grown from 13,000 in 1998 to 220,000 in 2009. In addition to long-established surgical techniques – gastric banding, gastric bypass, or laparoscopic sleeve gastrectomy - a number of new metabolic procedures such as duodenal-jejunal bypass or ileal interposition were presented. Conventional bariatric procedures are safe and effective, gaining broad acceptance especially for treatment of diabetes. Endoscopic procedures could radically change the cost/risk benefit equation. Dr. Dixon from Melbourne, Australia, presented Guidelines 2010 for bariatric surgery and type 2 diabetes (T2 DM). Bariatric surgery should be considered for adults with BMI < 35 and T2 DM, especially if the diabetes is difficult to control with lifestyle and pharmacological therapy. I am convinced that the number of serious obesity cases treated by means of bariatric surgery will be continuously increasing. The bariatric treatment leads not only to the reduction of weight and to its long-term sustenance, it leads also to the decrease of mortality and to a desirable adjustment of the metabolic parameters.

In one of the final afternoon blocks, the results of the SCOUT study (the Sibutramine Cardiovascular Outcome Trial) were discussed. Based on the results of the SCOUT study, the European Regulatory Agency suspended marketing authorization of sibutramine in the EU countries. It was stated that there is a difference between drug development studies which involve new chemical entities and have short duration of treatment and outcome studies (such as SCOUT) which involve licensed products and have usually a long duration of treatment. The issue of reintroducing sibutramine into the market then remains open. However, the administration of sibutramine in accordance with the valid contraindications is beneficial for the patients and I am persuaded that it will be possible to administer this drug again in a short time period.

Constantly increasing number of obese patients necessitates a complex therapy of obesity within the preventive programmes and in everyday medical practice. Only a complex approach to obese patients and the utilization of all available therapeutic methods provides a chance for success. Weight reduction has a positive influence on the quality of life and can significantly decrease health risks of all the obese patients

The IASO Executive Committee declared Kuala Lumpur, Malaysia, to be the host of the 12th ICO in 2014.

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