

The Changing Paradigm of Obesity Care

It has been recognised for long that obesity is at the core of several comorbidities including cardiometabolic disorders and cancer, besides being an important contributor for excess all-cause mortality.^[1] Despite this clear understanding, this condition has not received the focused and urgent attention from physicians and endocrinologists; this is critical not only for the control of obesity, but also for the prevention and control of non-communicable diseases (NCDs) in our country. The challenge of obesity has to be met with an organised system of obesity care and with the same urgent calls for action as we have been proposing for various other NCDs such as diabetes, cardiovascular disease and cancer. It is time we move from the paradigm of obesity – the risk factor to obesity – the disease. It has been proposed that first and foremost, we must all recognise obesity as a chronic disease that requires lifelong management. In fact, obesity has been renamed by some as adiposity-based chronic disease (ABCD).^[2] Unless we do this, successful management of obesity will continue to remain elusive as will be our goal of NCD prevention.

Several studies point to a rising prevalence of obesity in our country,^[3-6] particularly in urban areas.^[5] Obesity in children,^[7,8] adolescents,^[9,10] postmenopausal women^[11] and other specific groups of individuals is also gaining attention. While our diets are getting increasingly westernised and obesogenic, we are also faced with the fact that as a nation, we are largely sedentary.^[12] Any efforts to improve obesity care in our country, whether it is at a community level or in the clinic, should recognise these as important challenges that need to be addressed by specific strategies.

The unique ‘Thin Fat’ Indian phenotype, which is now well documented^[13,14] in Asian Indians, has its own challenges. Firstly, it focuses our attention on abdominal obesity and visceral adiposity in the pathogenesis of cardiometabolic risk in Indians. This additional risk at lower body mass index (BMI) due to larger waist has led to redefining obesity cutoffs for BMI in Indians. Secondly and more importantly, it raises the possibility that adiposopathy could be at the core of diabetes and cardiovascular risk among Indians. This view has been supported by several recent studies from our country^[15-17] and reinforces the concept that a better understanding of this unique phenotype is the key to the success of our efforts in reducing the burden of obesity and the consequent cardiometabolic risk in our country.

The endocrinologist or the obesity physician is faced with several challenges in managing the obese patient in the clinic. We are all aware of the frustration of the physician as well as the patient when weight loss targets are not achieved in clinical practice. It might be useful to understand some of

these challenges to be able to make meaningful differences to the efforts at weight loss.

It is well recognised that it is the net energy balance that determines whether weight loss will be achieved or not. However, one of the most common errors in clinical practice is the failure to acknowledge the importance of meticulously monitoring the energy intake and energy expenditure in each patient to be able to track changes in weight as a function of changes in energy balance. Another major challenge in managing the obese patient is the lack of effective and safe anti-obesity drugs, which not only cause clinically important weight loss, but also favourably impact cardiometabolic risk. Widespread use of drugs in clinical practice which can also promote obesity is yet another hidden challenge that may compromise efforts to reduce weight and about which the physician needs to be aware. Antidepressants, antiepileptics and insulin secretagogues are common examples. Physicians must also be aware of other barriers to successful and sustained weight loss, such as the problem of weight regain which may require specific strategies and the problem of sleep and circadian rhythm disturbances which may resist any significant decrease in weight. Newer strategies beyond traditional approaches, such as the use of keto diets and timed fasting, are increasingly being used in obesity with variable success, especially in selected patients.

The complexities of managing obesity are many and there are no easy solutions. Successful weight management that translates into significant cardiometabolic risk reduction requires dedicated obesity clinics and obesity management teams consisting of the endocrinologist/obesity physician, nutritionist, obesity nurse educator and/or an exercise physiologist, a clinical psychologist and a bariatric surgeon, who develop patient-specific strategies based on individual needs, motivation and barriers. Even in resource-limited settings, it would be desirable to have a physician, a nutritionist and an obesity nurse educator in the team. There is an urgent need to formalise the practice of bariatric endocrinology and make a paradigm shift in the way obesity is managed.

The Endocrine Society of India, recognising the need for a uniform and structured management approach for obesity and keeping all the complexities and limitations in mind, decided to frame consensus guidelines for the management of obesity. These guidelines, which have been published in the current issue, discuss the problem of obesity in our country, including some of its unique features, and provide a framework that guides the physician to take appropriate decisions in managing the obese individual. This should enable evidence-based practice of bariatric endocrinology and by suitably empowering obesity physicians and endocrinologists, should make a significant difference in obesity care in our country.

S. V. Madhu

Department of Endocrinology, Centre for Diabetes, Endocrinology and Metabolism, University College of Medical Sciences, Delhi, India

Address for correspondence: Dr. S. V. Madhu, Professor, Department of Endocrinology, Centre for Diabetes, Endocrinology and Metabolism, University College of Medical Sciences, Delhi, India. E-mail: drsvmadhu@gamil.com

REFERENCES

- Haslam DW, James WP. Obesity. *Lancet* 2005;366:1197-209.
- Mechanic JI, Hurley DL, Garvey WT. Adiposity-based chronic disease as a new diagnostic term: The American Association of Clinical Endocrinologists and American College of Endocrinology position statement. *Endocr Pract* 2017;23:372-8.
- Puska P, Nishida C, Porter D, Organization WH. Obesity and overweight. World Health Organization; 2003. p. 1-2.
- Pradeepa R, Anjana RM, Joshi SR, Bhansali A, Deepa M, Joshi PP, *et al.* Prevalence of generalized & abdominal obesity in urban & rural India--The ICMR-INDIAB Study (Phase-I) [ICMR- NDIAB-3]. *Indian J Med Res* 2015;142:139-50.
- Madhu SV, Sandeep G, Mishra BK, Aslam M. High prevalence of diabetes, prediabetes and obesity among residents of East Delhi - The Delhi urban diabetes survey (DUDS). *Diabetes Metab Syndr* 2018;12:923-7.
- Verma M, Das M, Sharma P, Kapoor N, Kalra S. Epidemiology of overweight and obesity in Indian adults - A secondary data analysis of the National Family Health Surveys. *Diabetes Metab Syndr* 2021;15:102166.
- Marwaha RK, Tandon N, Singh Y, Aggarwal R, Grewal K, Mani K. A study of growth parameters and prevalence of overweight and obesity in school children from delhi. *Indian Pediatr* 2006;43:943-52.
- Misra A, Shah P, Goel K, Hazra DK, Gupta R, Seth P, *et al.* The high burden of obesity and abdominal obesity in urban Indian schoolchildren: A multicentric study of 38,296 children. *Ann Nutr Metab* 2011;58:203-11.
- Jagadesan S, Harish R, Miranda P, Unnikrishnan R, Anjana RM, Mohan V. Prevalence of overweight and obesity among school children and adolescents in Chennai. *Indian Pediatr* 2014;51:544-9.
- Solanki DK, Walia R, Gautam A, Misra A, Aggarwal AK, Bhansali A. Prevalence of abdominal obesity in non-obese adolescents: A North Indian adolescent study. *J Pediatr Endocrinol Metab* 2020;33:853-8.
- Singhania K, Kalhan M, Choudhary P, Kumar T. Association of menopausal symptoms with overweight and obesity among rural middle aged women in North India: A population based study. *J Midlife Health* 2020;11:137-43.
- Anjana RM, Pradeepa R, Das AK, Deepa M, Bhansali A, Joshi SR, *et al.* Physical activity and inactivity patterns in India--results from the ICMR-INDIAB study (Phase-1)[ICMR-INDIAB-5]. *Int J Behav Nutr Phys Act* 2014;11:1-11.
- Kapoor N. Thin Fat Obesity: The Tropical Phenotype of Obesity. In: Feingold KR, Anawalt B, Boyce A, Chrousos G, de Herder WW, Dhatariya K, *et al.*, editors. *Endotext*. South Dartmouth (MA): MDText.com, Inc.; 2000.
- Kapoor N, Furler J, Paul TV, Thomas N, Oldenburg B. Normal weight obesity: An underrecognized problem in individuals of South Asian Descent. *Clin Ther* 2019;41:1638-42.
- Saxena A, Wahli N, Kumar A, Mathur SK. Functional interactomes of genes showing association with type-2 diabetes and its intermediate phenotypic traits point towards adipo-centric mechanisms in its pathophysiology. *Biomolecules* 2020;10:601.
- Mishra BK, Banerjee BD, Agrawal V, Madhu SV. Association of PPAR γ gene expression with postprandial hypertriglyceridaemia and risk of type 2 diabetes mellitus. *Endocrine* 2020;68:549-56.
- Mishra BK, Madhu SV, Aslam M, Agarwal V, Banerjee BD. Adipose tissue expression of UCP1 and PRDM16 genes and their association with postprandial triglyceride metabolism and glucose intolerance. *Diabetes Res Clin Pract* 2021;182:109115.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online

Quick Response Code:



Website:

www.ijem.in

DOI:

10.4103/2230-8210.356237

How to cite this article: Madhu SV. The changing paradigm of obesity care. *Indian J Endocr Metab* 2022;26:293-4.