## Metabesity: The sword with two edges

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Pakistan is positioned among the top ten countries in terms of the prevalence of obesity, which exposes its citizens to a heightened risk of developing metabolic disorders and metabolic conditions. Metabolic disorders, such as diabetes, manifest concurrently with obesity and other metabolic disorders. Weight gain is additionally correlated with cardiovascular and neurovascular diseases, as well as accelerated ageing, in addition to the aforementioned complications<sup>1</sup>. Metabolic conditions are distinguished by an intricate interplay of genetic, behavioural, and metabolic elements; thus, comprehensive management protocols are especially crucial, especially for the population of Pakistan. For this purpose, standardized guidelines and literature that had undergone rigorous evaluation were consulted, including those established by the American Society of Clinical Endocrinology (AACE). Regular examinations for diabetes, dyslipidemia, and cardiovascular diseases, a uniform set of diagnostic criteria, are advised by established protocols for the management of metabesity. Risk assessment involves the evaluation of several physiological parameters, including fasting blood sugar levels (>99mg/dL), high blood pressure (>135/85mmHg), and waist circumference (>90cm in men and >80cm in women in accordance with Asian-based guidelines). The lipid profile (HDL <40mg/dl in men and <50mg/dl in women) is also assessed<sup>2.3</sup>.

Pakistan ranks within the top ten nations with respect to obesity prevalence, wherein citizens face an elevated susceptibility to metabolic disorders and metabesity. Metabolic disorders, including diabetes, are a concomitant manifestation of obesity and metabolic disorders. In addition to these complications, accelerated ageing and cardiovascular and neurovascular diseases are also associated with obesity<sup>4,5</sup>. The recommendation by metabesity guideline includes patients who are adults (20-45 years) must undergo total cholesterol levels and LDL cholesterol screenings every 5 years; if an aberrant profile is detected, the screenings should be repeated every 3 months. Screening on an annual basis is advised for elderly patients. These evaluations must be repeated in infants and adolescents following a period of three years.

When performed in a standardized laboratory, HbA1c is a basic screening instrument that must be utilized in individuals at risk for diabetes. HbA1c concentrations exceeding 6.5% necessitate supplementary diagnostic procedures, including fasting blood glucose monitoring or a 2-hour 75g glucose tolerance test.

In conjunction with waist circumference measurement, assays for fasting blood sugar, blood pressure, triglycerides, and levels of HDL must be chosen in order to diagnose metabesity. When three out of five aberrant findings are present, metabesity is diagnosed.

In order to diagnose persistent liver disease or nonalcoholic fatty liver disorder (NAFLD), ultrasound is the test of choice. Regular assessment of at-risk individuals, particularly diabetic patients, is essential. One hundred fifty minutes of vigorous-intensity activity per week, or 75 minutes of moderately intense exercise per week.

Incorporating cognitive behavioural therapy into psychosocial stress management may aid in the reduction of food dependence. Techniques of meditation are recommended for the management of psychosocial stress.

Orlistat or liraglutide: For those who have a body mass index (BMI) greater than 27kg/m<sup>2</sup> and a medical history of cardiovascular or metabolic risk factors; or those who have a BMI greater than 30kg/m<sup>2</sup>. Metabolic patients should ideally benefit from long-term treatment with orlistat.

Patients who have pre-existing neurological or psychological conditions should be prescribed orlistat 120mg due to its favourable safety profile. Patients with psychiatric disorders should not be prescribed weight loss medications that cause neuropsychiatric adverse effects.

In order to prevent subsequent occurrences of stroke, it is imperative to establish a weight loss objective ranging from 5 to 10%, with the target BMI remains within the interval of 22 to 25 kg/m<sup>2</sup>.

Patients who are prescribed bariatric surgery are those who have a body mass index (BMI) exceeding 35 kg/m<sup>2</sup> or who have comorbid conditions that significantly impact their quality of life as a result of their obesity.Practitioners must implement patient-centered approaches and culturally sensitive educational practices in managing the symptoms of metabesity<sup>6</sup>.

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