



Management of Obesity in Midlife Women—An AIIMS DST FOGSI Initiative

Geetha Balsarkar¹

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Obesity in midlife women is a public health challenge. In midlife, chronological ageing alone is known to contribute an average of half a kilogram weight gain in a year. Midlife women transitioning from reproductive to non-reproductive phase experience several biological and hormonal changes that lead to weight gain, especially in the abdominal region. Further, this menopausal transition affects their lifestyle related behaviours like eating, activity and sleep practice in a way that promotes weight gain. These women find it difficult to manage corrective eating and activity behaviour in day-to-day life as they prioritise their roles at home and work over their weight and health related issues. [1]

Weight gain in midlife is also associated with chronic cardiometabolic disorders including diabetes, hypertension, and dyslipidaemia and obesity related disorders such as non-alcoholic fatty liver, sleep apnoea, and osteoarthritis in later years. Generally, midlife women presenting with weight related health issues at healthcare settings are given generic lifestyle counselling like “eat healthy foods” and “exercise regularly”. Considering the nature of this advice, even highly motivated midlife women find it challenging to maintain corrective lifestyle-related behaviours when they encounter midlife specific barriers and poor weight loss outcomes in the long term. The midlife specific barriers need to be addressed by the healthcare providers for appropriate weight management.

Healthcare providers are obligated to provide opportunistic management on encountering midlife women with overweight and obesity. This highlights the need to protocolise the management of overweight and obesity in midlife women using evidence based clinical practice for ensuring

uniform and adequate weight management at different health care settings. [2]

Opportunistic screening and management of obesity should be delivered all through the lifespan of a woman. In the late thirties, before menopause transition, women should be counselled about the added risk of menopause-related weight gain and body fat distribution. Opportunistic screening and management of obesity should be continued. In the early forties, when women experience menopausal transition, an intensive customized weight management counselling should be given. The emphasis should be on corrective lifestyle behaviour and handling health issues specific to menopausal transition like menopausal symptoms, sleep disturbances, psychological distress, bone and joint health and other comorbidities.

Wherever feasible, a multi-disciplinary team consisting of primary care physicians, clinicians, dietitian and exercise physiologist/physiotherapist should be involved in weight management of midlife women. Family physicians, clinicians, psychologists/psychiatrists, endocrinologists and orthopedicians should be involved whenever indicated. All the healthcare workers should be empowered with the knowledge and skills for prevention, diagnosis and treatment of obesity in midlife women.

For initiating a weight management intervention, the class of generalised obesity should be identified according to the BMI-cut-off:

- 18.5- 22.9 kg/m² - Normal weight
- 23.0-24.9 kg/m² - Overweight
- ≥ 25 kg/m² – Obesity

Waist Circumference cut-off for women should be followed for initiating a weight management intervention

- Waist Circumference less than or equal to 72 cm - Normal

Geetha Balsarkar: Editor in Chief.

✉ Geetha Balsarkar
gdbalsarkar@yahoo.com

¹ Mumbai, India

- Waist Circumference more than 72 cm but less than 80 cm - Associated with one cardiometabolic risk factor -Initiate weight management advice
- Waist Circumference more than 80 cm- Associated with cardiometabolic comorbidities- Initiate intensive weight management.

The detailed dietary evaluation should include an assessment of the usual meal pattern (including the quantity of food items consumed) and dietary habits (including skipping meals, consumption of high fat, salt and sugar foods [HFSS] foods, usual frequency of eating out, emotional/ stress eating). [3]

Twenty-four-hour dietary recall and food frequency questionnaire for three days (two weekdays and one weekend) should be used for dietary evaluation, if feasible. Energy, macronutrient, fiber intake should subsequently be calculated. Alternatively, a short validated questionnaire can be used. Dietary intake of foods rich in protein, iron, and calcium should also be assessed while taking dietary history. The barriers faced by midlife women to maintain a healthy diet in their daily lifestyle should be enquired.

Assessment should include inquiry into the presence of a diagnosed psychiatric disorder, especially depressive, anxiety or eating disorder.

If there is clinical suspicion, DASS- 21 can be used as an initial screening tool for assessment of depression, anxiety and stress.

In case a diagnosed psychiatric disorder is present, then the current condition of the psychiatric disorder and use of psychotropic medications should be asked for by the weight management team.

The referral to a mental health professional should be considered if:

1. Dietary history reveals eating to cope with stress.
2. There is a sudden lack of motivation for weight reduction.
3. There are persistent interpersonal difficulties with the weight management team.
4. DASS-21 score indicates the possibility of depression, anxiety or stress.
5. There is a history of diagnosed psychiatric disorder.
6. There is clinical suspicion of a known psychiatric disorder.

In midlife women, lifestyle intervention should be initiated if they have any known cardiometabolic risk factors (like abnormal blood sugar, increased blood pressure, dyslipidemia) or obesity-related complications (like non-alcoholic fatty liver, sleep apnoea, joint issues). [4]

Menopause Rating Scale (MRS) is used for evaluation of menopausal symptoms which includes physical,

psychological, vasomotor, genitourinary and sexual domains. The impact of menopausal symptoms severity on weight related behaviours (diet, activity and sleep) should also be assessed.

The healthcare provider should assess the readiness to engage in weight loss attempts by changing current diet and activity using behavioural modification.

Realistic and sustainable patient-centric weight loss goals should be established after detailed discussion with the midlife woman.

If feasible, family members should be involved and similar health goals should be planned for them.

Overweight and obese women should be advised to reduce body weight to the BMI equal to or less than 23 kg/m².

A step-wise body-weight loss goal should be set with a target weight loss of 0.5 kg per week acquiring 5-10% of clinically significant weight loss over a period of 6 months. [5]

A customised diet plan should be recommended considering eating preferences, food habits and health status of the patient. The meal pattern should be spread throughout the day preferably involving three major meals and two snacks. The daily dietary calorie intake should be based on the baseline caloric intake and level of physical activity of the midlife woman. The diet plan should incorporate an energy deficit of 500 kcal per day in order to achieve weight loss of 0.5 kg body weight per week. *Restricted carbohydrate, good quality fat and high protein diet is recommended for midlife women. Women should be counselled to consume foods rich in protein, calcium and iron in their daily diet to meet the estimated average requirement (EAR). Dietary fibre intake of 20 - 30 grams per day should be prescribed from whole grains, legumes, nuts, oilseeds, fruits and vegetables. Restricted consumption of food products high in fat, sugar and salt (HFSS) should be emphasised. Salt intake should be limited to less than 5 g/day. Dietary intake of foods rich in phytoestrogen from the Indian diet should be encouraged.

Midlife women should be encouraged to avoid remaining physically inactive as far as possible by ensuring participation in dedicated exercise, household related, work-related and leisure related physical activities. [6]

A stepwise progressive and personalized physical exercise regime based on body weight, presence of cardiometabolic risk factors, bone, muscle and joint health should be prescribed. The barriers and facilitators related to personal health and environment for different types of physical exercise should also be considered while prescribing physical exercise regime. Women should be encouraged to incorporate up to 300 min/week of moderate-intensity aerobic physical activity or 150 min/week of high- intensity aerobic physical activity or an identical combination of moderate and

high-intensity exercise. Ideally, a total of 60 minute of physical activity should be recommended including a combination of aerobic exercise (30 minutes moderate intensity), muscle strengthening (15 minutes engaging major muscle groups), work-related and/or household related activities (15 minutes).

The women can participate in physical activity in short bouts (10–15 minutes) throughout the day (2–3 times). Aerobic exercises should be performed at least for 10 minutes. Pelvic balance exercises should be prescribed for weight maintenance. Intensive Yoga can be prescribed for weight management and overall well-being in midlife women. What are the behavioural techniques/behaviour modification techniques that should be incorporated in weight management advice? [7]

Behaviour modification techniques such as realistic goal setting, motivational interviewing, and self-monitoring strategies could be used. The patient should be trained regarding problem solving skills such as defining problems, creating solutions and opting for the best possible choice. Cognitive restructuring skills like identifying, challenging, and correcting the negative thoughts that women usually face during the weight loss process should be imparted. Feedback on the accomplishments, achievements and scope for better progress should be given regularly. [8]

Menopause Hormone Therapy (MHT) is not indicated solely for weight management in midlife women. Weight management by lifestyle interventions may help in improving the overall well-being of midlife women with menopausal symptoms.

In addition to weight management, midlife women with obesity should be appraised and sensitised about the benefits of a healthy lifestyle on bone health, muscle strength and menopausal symptoms.

The time schedule for the intervention phase of the weight management should be decided on the basis of target weight loss to be achieved in the patient. The duration of the intervention phase should be planned such that the patient can lose 5–10% body weight in every six months. Bimonthly contact should be planned in the initial stages of intervention phase that can be reduced to monthly contact in the later phase. A combination of physical (face-to-face and/or group counselling) and online meeting modalities/telephonic contacts can be used for the contact. [9]

Weight maintenance phase should be continued throughout life with sequential incorporation of parameters related to holistic well-being. Face-to-face contact can be maintained every three months coupled with a monthly contact using technological components such as text messages, telephonic calls and mobile applications.

At every contact, healthcare providers should reinforce healthy eating, activity and sleep habits and address barriers and challenges faced during this phase. During follow-ups, self-monitoring through technological devices should be encouraged to maintain weight, dietary, activity and sleep

routine records. Throughout weight maintenance, special attention should be given to the behavioural strategies such as enhancing motivation, social support, self-efficacy, problem solving, relapse prevention and addressing individualised barriers. Clinical and biochemical parameters such as blood glucose, lipid profile and blood pressure measurements should be done as per the standard guidelines and/or advice by treating doctor. Adequate and appropriate care of bone, muscle, joints and menopausal symptoms should be ensured during follow up contacts to ensure holistic well-being. [10]

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