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A pioneer in menopause research, Dr. Utian founded the world's first menopause clinic in Cape Town, South Africa, in 1966 and established the Cleveland Menopause Clinic in 1983.

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Weight, Menopause and Hormones

One of the frequent questions raised in clinical discussions is whether menopause of itself influences body weight or body mass index (BMI), or if sex hormone therapy can cause an increase in body weight. The subject of increased body weight, apart from perceived aesthetics, is one of considerable health-related importance. Increased BMI is associated with a negative cardiovascular risk profile through multiple potential mechanisms, including altered glucose metabolism, lipid changes, blood pressure elevation and prothrombotic factors. It can be responsible for increased morbidity with surgical procedures, reduced mobility and decreased quality of life.

Increasing body weight is becoming a national pandemic. Separating menopause from other factors as an influencing mechanism on elevated BMI is complex; therefore, inconsistent reports come from cross-sectional studies. These studies have been largely flawed by incomplete knowledge of the date of actual onset of menopause. Of greater significance have been reports from longitudinal studies that BMI appears to be related more to age than menstrual cessation.¹⁻⁴ The current point of view would therefore suggest that the menopause transition, of itself, does not influence body weight.

We can look forward to data from the multicenter National Institutes of Health/SWAN (Study of Women's Health Across the Nation) research to clarify the relationship between menopause transition and body weight. In particular, that study promises to differentiate racial and socioeconomic factors from endocrine and aging issues.

There is no real evidence that hormone therapy (HT) causes or is associated with any increase in BMI. Quite to the contrary, there is a large body of data suggesting no increase in BMI in women on HT. The first randomized, placebo-controlled estrogen study demonstrated no influence of two different estrogens on the body weight of 50 oophorectomized women.⁵ In the Postmenopausal Estrogen/Progestin Interventions (PEPI) trial, there was a slight increase in weight in the placebo group, but over the course of that particular study there was no difference in weight between placebo and HT takers.⁶

Finally, one more question remains: Does BMI influence response to dosage of estrogen or estrogen plus progestin therapy? That is, is it feasible that women with lower BMI might benefit from lower doses of hormones or, conversely, that women with higher BMI require larger doses?

One aspect of this was addressed in a further analysis of the Women's HOPE (Health, Osteoporosis, Progestin, Estrogen) Study, the largest placebo-controlled, dose-ranging, randomized, prospective, blinded study of estrogen (conjugated equine estrogen [CEE]) and estrogen-progestogen (CEE with medroxyprogesterone acetate [MPA])

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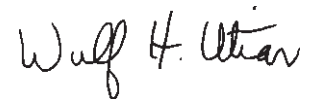
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published to date.⁷ The intent-to-treat population of the Women's HOPE Study was used to examine the effects of BMI on treatment response and changes in vasomotor symptoms. The efficacy-evaluable population was also used in the assessment of the effects of BMI on the treatment response of vaginal atrophy, bleeding profile and endometrial hyperplasia. For this analysis of BMI effects, two categories were used, namely BMI <25 and BMI ≥25.

Preliminary findings from the Women's HOPE Study suggested that vasomotor changes, vaginal atrophy, bleeding profile and hyperplasia rates appear to reflect effects of hormonal therapies and not BMI category.⁸ These relationships were seen across the dosing categories. BMI did not influence the outcome of hot flush frequency and severity with either CEE or combination therapy. In addition, none of the hormone therapies had any significant effect on body weight at 1 and 2 years.

Thus, BMI does not independently affect the treatment responses to vasomotor symptoms, vaginal atrophy, bleeding profiles or hyperplasia. Use of lower-dose HT regimens appears to be effective across BMI categories.

What then is the message regarding sex hormones, menopause and BMI? While they are probably not related, in that neither menopause nor ET/HT appears to be associated with weight gain and BMI does not determine symptomatic response to therapy, BMI is nonetheless an important component of menopause management. Of itself, elevated body weight is a negative factor for morbidity and mortality. It should therefore be raised as an item for health-related discussion every time an overweight patient is seen.



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