



Menopause and diabetes

Diabetes mellitus is a common endocrine disorder characterized by insulin deficiency and/or resistance (type 2) and resulting in hyperglycemia.

Diabetes in women

- Both type 1 and type 2 diabetes carry an increased risk of cardiovascular disease.
- Type 1 diabetes, which may start in childhood, is associated with an increased risk of premature ovarian failure and osteoporosis.
- The risk of type 2 diabetes increases at midlife in women.
- Risk factors for type 2 diabetes include advancing age, increased total and central adiposity, and decreased physical activity.
- A healthy diet, regular physical activity, maintaining a normal body weight and stopping smoking may prevent or delay the onset of type 2 diabetes.
- Gestational diabetes occurs in pregnancy and may increase the risk of developing type 2 diabetes and cardiovascular disease in later life.

Menopausal hormone therapy and diabetes

- Neither systemic nor topical menopausal therapy is contraindicated.
- Therapy should be individualized, taking into account age, metabolic, cardiovascular risk factors and lifestyle interventions such as weight loss.
- Weight loss may reverse type 2 diabetes.
- Oral estrogens may be preferred in women with low to moderate cardiovascular risk, as they may improve insulin resistance.
- The effect of progestogens on insulin resistance varies with the type and route of administration.
- Micronized progesterone, transdermal norethisterone or oral dydrogesterone may be preferred.

About 422 million people worldwide have diabetes and 1.5 million deaths are directly attributed to diabetes each year.

Further information

Diabetes. World Health Organization 2021 <https://www.who.int/news-room/fact-sheets/detail/diabetes>

EMAS CareOnline 2020 <https://emas-online.org/emas-careonline>

Menopause and diabetes: EMAS clinical guide 2018 <https://doi.org/10.1016/j.maturitas.2018.08.009>