



Menopausal hormone therapy, heart disease and stroke

Cardiovascular diseases (CVDs) (coronary heart disease, stroke, heart failure) are the main cause of death in both genders worldwide. Coronary heart disease and stroke present later in women than in men.

Studies that have informed practice

- The Women's Health Initiative
- Early versus Late Intervention Trial with Estradiol (ELITE)
- Kronos Early Estrogen Prevention Study (KEEPS)
- Danish Osteoporosis Prevention Study (DOPS)
- Danish and Finnish registry studies

Summary of findings

- **Menopausal hormone therapy (MHT)** may decrease the risk of cardiovascular disease and all-cause mortality in women under 60 years of age and within 10 years of menopause.
- Early initiation of MHT after menopause has the greatest benefit.
- MHT started in women under 60 years of age or up to 10 years after menopause does not have cardiovascular benefits but does not cause harm.
- MHT may confer a small risk of stroke, more so with oral than with transdermal estrogen.
- In women with **premature ovarian insufficiency**, the use of MHT until the average age of menopause is recommended.

Cardiovascular risk groups and MHT

- Women at very high cardiovascular risk (SCORE $\geq 10\%$) should receive only topical estrogen treatment in combination with secondary prevention for the management of cardiovascular risk factors.
- Women at high cardiovascular risk (SCORE 5% to $< 10\%$) can receive topical MHT in combination with primary or secondary prevention strategies for cardiovascular risk factors. If systemic MHT is needed, transdermal regimens may be used.
- Women at moderate cardiovascular risk (SCORE $\geq 1\%$ up to $< 5\%$) can be offered any type of systemic MHT with or without primary prevention strategies for the management of risk factors.
- Women at low cardiovascular risk (SCORE $< 1\%$) can be offered any type of MHT.

Women with known coronary heart disease or stroke or with significant risk factors should be assessed by specialist services.

Further information

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

Consensus document from European cardiologists, gynaecologists, and endocrinologists <https://doi.org/10.1093/eurheartj/ehaa1044>

SCORE2-OP working group and ESC Cardiovascular risk collaboration (2021). SCORE2-OP risk prediction algorithms <https://doi.org/10.1093/eurheartj/ehab312>