

Is HRT Right for Every Woman? A Midlife Guide to Genetics, Clotting Risk & Personalized Hormone Therapy

Hormone Replacement Therapy (HRT), also called Menopausal Hormone Therapy (MHT), can be incredibly helpful for some women during perimenopause and post-menopause. This guide references: **VTE** = Venous Thromboembolism (blood clots that form in the veins) **DVT** = Deep Vein Thrombosis (a blood clot usually occurring in the legs) For many women, HRT may improve hot flashes, sleep, mood, vaginal dryness, bone health, and quality of life. But HRT is not automatically the right choice for every woman.

Who May Be a Good Candidate for HRT

Women under age 60 Within 10 years of menopause onset Moderate to severe menopausal symptoms No major clotting, liver, stroke, or estrogen-sensitive cancer history

Who May NOT Be a Good Candidate

History of DVT or pulmonary embolism Inherited clotting disorders Stroke or heart attack history Estrogen-sensitive cancers Active liver disease Unexplained vaginal bleeding

Genetic Mutations That Matter

Factor V Leiden Mutation

May significantly increase clotting risk with oral estrogen use. **Prothrombin G20210A Mutation**

Associated with elevated DVT and pulmonary embolism risk. **Protein C, Protein S & Antithrombin Deficiencies**

Inherited clotting disorders that may increase thrombotic risk.

Oral vs. Transdermal Estrogen

Research suggests oral estrogen may carry higher clotting risk because it passes through the liver first. Transdermal estrogen (patches, creams, gels) bypasses much of this first-pass liver effect and may have lower VTE risk.

Bio-Identical Hormone Therapy

“Bio-identical” hormones are structurally identical to hormones produced by the human body. There is a difference between: FDA-approved bio-identical hormones Custom compounded hormones Bio-identical does not automatically

mean risk-free.

Genetic Testing

Some women may benefit from genetic testing before starting HRT, especially with: Family history of blood clots
Stroke history Multiple miscarriages Strong family history of breast or ovarian cancer The DNA Company, founded by
Kashif Khan, is one company focused on functional genomics and personalized health.

The Bigger Picture

The goal is not fear-based messaging or one-size-fits-all recommendations. The goal is informed, individualized
decision-making based on the woman in front of you.

Research & Reference Highlights

- North American Menopause Society (2022). Hormone Therapy Position Statement.
- ACOG Committee Opinion No. 556.
- Canonico et al. (2007). Estrogen administration and VTE risk.
- Cushman et al. (2004). Estrogen Plus Progestin and Venous Thrombosis.
- ESTHER Study – Estrogen and Thromboembolism Risk.
- American Society of Hematology: Thrombophilia Guidance.

Educational Disclaimer: This guide is for educational purposes only and is not medical advice.