

MENOPAUSE AND HORMONE REPLACEMENT THERAPY: BENEFITS AND RISKS

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Introduction:

Menopause represents a natural biological transition characterized by the permanent cessation of ovarian function, leading to significant changes in reproductive hormones, particularly estrogen and progesterone. These hormonal fluctuations contribute to a wide spectrum of clinical symptoms, including vasomotor instability, urogenital atrophy, mood disturbances, and long-term metabolic shifts affecting cardiovascular, skeletal, and cognitive health. Hormone Replacement Therapy (HRT) has emerged as the most effective therapeutic approach for managing moderate to severe menopausal symptoms; however, its use requires careful evaluation of individual risk factors, comorbidities, treatment duration, and formulation choice. The increasing prevalence of postmenopausal complications underscores the importance of understanding both the therapeutic potential and the safety concerns of HRT.

Objective:

To assess the clinical benefits and potential risks associated with Hormone Replacement Therapy in menopausal women and to evaluate its role in improving quality of life, symptom control, and long-term health outcomes.

Materials and Methods:

This thesis is based on a descriptive clinical review of contemporary literature, including randomized controlled trials, cohort studies, and guideline recommendations published over the past decade. Data were analyzed regarding symptom relief, bone density preservation, cardiovascular outcomes, thromboembolic risk, breast cancer incidence, and overall patient satisfaction. Inclusion criteria encompassed studies involving peri- and postmenopausal women receiving systemic or localized HRT. Exclusion criteria included studies not reporting clinical outcomes or lacking standardized therapeutic protocols.

Results:

Analysis revealed that HRT significantly reduces vasomotor symptoms by up to 75%, improves sleep, stabilizes mood, and enhances overall quality of life. Estrogen therapy demonstrated strong protective effects on bone mineral density, lowering the risk of osteoporotic fractures, particularly in early postmenopausal women. Local estrogen preparations provided marked improvement in urogenital atrophy and sexual dysfunction. However, systemic HRT was associated with an increased risk of venous thromboembolism and, in some formulations, a slightly elevated risk of breast cancer, particularly with prolonged combined estrogen-progestin therapy. Cardiovascular outcomes varied depending on patient age, initiation time, and underlying risk factors, with early initiation showing more favorable results compared to late initiation.

Discussion:

The findings highlight that HRT remains the most effective option for symptomatic menopause management, especially when initiated in women under 60 years of age or within 10 years of menopause onset. Benefits are most notable for vasomotor control, bone protection, and prevention of urogenital atrophy. Nevertheless, therapy must be individualized, balancing symptom severity with personal and familial risk factors, including cardiovascular history, thrombotic predisposition, and cancer susceptibility. Modern low-dose and transdermal formulations have shown improved safety profiles, reducing thrombotic risk while maintaining efficacy. Shared decision-making between clinicians and patients plays a crucial role in optimizing therapeutic outcomes and minimizing adverse effects.

Conclusion:

Hormone Replacement Therapy offers substantial clinical benefits for menopausal women, particularly in alleviating vasomotor symptoms, supporting bone health, and improving psychological and urogenital well-being. While certain risks such as thromboembolism and breast cancer require careful consideration, appropriate patient selection, individualized dosing, and ongoing clinical monitoring can significantly enhance treatment safety. HRT remains a valuable therapeutic tool when applied judiciously, with benefits outweighing risks in well-selected candidates, ultimately contributing to improved long-term health and quality of life during menopause.

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