

Role of Hormone Replacement Therapy

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III year PG

Premature Ovarian Insufficiency

- POF increases risk of CVD, osteoporosis, dementia, cognitive decline.
- Need HRT/estrogen until average age of menopause ie 52 years.
- This does not increase breast cancer risk compared to that found in normally menstruating women

Osteoporosis

- Reduces risk of osteoporotic fractures at both spine and hip-RCT evidence.
- Bone sparing dose estradiol 2mg, conjugated equine estrogens 0.625mg and transdermal 50mcg patch.
- But half these doses or even lower also conserve bone mass.

- Continuous and life long use is required.
- Estrogen is the best option, particularly in younger (less than 60 years and/or symptomatic women.
- References: British Menopause Society Consensus statement Oct 2007
<http://www.thebms.org.uk>. Menopause International: 13;178-181

HRT and Breast Cancer

- HRT confers same degree of risk as late natural menopause for breast cancer.(2.3% compared to 2.8% per year respectively).
- No increased risk breast cancer in women taking HRT for a premature menopause under age 50, primary ovarian insufficiency ,pure gonadal dysgenesis - WHI.

Endometrial cancer risk and HRT after 5 or more years of use.



Type	OR
oestradiol alone	6.2 (95% CI 3.1-12.6)
conjugated oestrogens	6.6 (95% CI 3.6-12.0).
cyclic use of progestogens plus oestrogen i.e., fewer than 16 days per cycle (most commonly 10 days)	2.9 (95% CI 1.8-4.6)
continuous progestogen use along plus oestrogens	0.2 (95% CI 0.1-0.8)

- OR= odds ratio
- CI= confidence interval
- Weiderpass et al 1999

- WHI no increase risk endometrial cancer with continuous combined therapy.

HRT and VTE (WHI)

- Combined HRT-VT risk increased(HR 2.06; 95% CI, 1.57-2.70).
- Risk increases with age.
- Risk increases in overweight and obese women.
- Meta-analysis of observational studies showed that oral oestrogen but not transdermal oestrogen increased the risk of VTE

Cardiovascular

- Absolute risk of coronary artery disease in age <50 years was lowered by 5 times in those using oestrogen alone than combined HRT
- Hormone therapy increased the risk of stroke (HR, 1.32; 95% CI, 1.12-1.56).
- Risk did not vary significantly by age or time since menopause.

Dementia and cognition

- WHI found a two-fold increased risk of dementia in women with both oestrogen and progestogen and oestrogen alone.
- However, this increased risk was only significant in the group of women over the age of 75 years.
- There may be a window of opportunity in the early post menopause when the pathological processes are being initiated.

Ovarian cancer

- Most important risk factors are increasing age and BRCA1/2 gene mutations
- Results contradictory
- Combined HRT versus estrogen alone
- MWS both E alone and combined HRT increased risk.
- WHI no increased risk with combined HRT.

Where Are We Now?

- Differences between regimens (E vs E+P)
- Timing
- Duration of use
- Premature menopause
- Dose one size does not fit all
- Route : oral vs transdermal
- Place and safety of alternative treatments

Thank You