

HORMONE REPLACEMENT THERAPY AND COGNITION IN MENOPAUSAL WOMEN

DR STAMATIOS TZANNINIS

CORE MEDICAL TRAINEE CT1 IN SALISBURY DISTRICT HOSPITAL, FINAL YEAR MSC STUDENT IN THE UNIVERSITY OF EDINBURGH



Hormone Replacement → Therapy = oestrogens alone e.g. 17β-oestradiol, conjugated equine oestrogen
Or
Progestins alone e.g. micronised progesterone, medroxyprogesterone acetate
or
A combination of both

Introduction

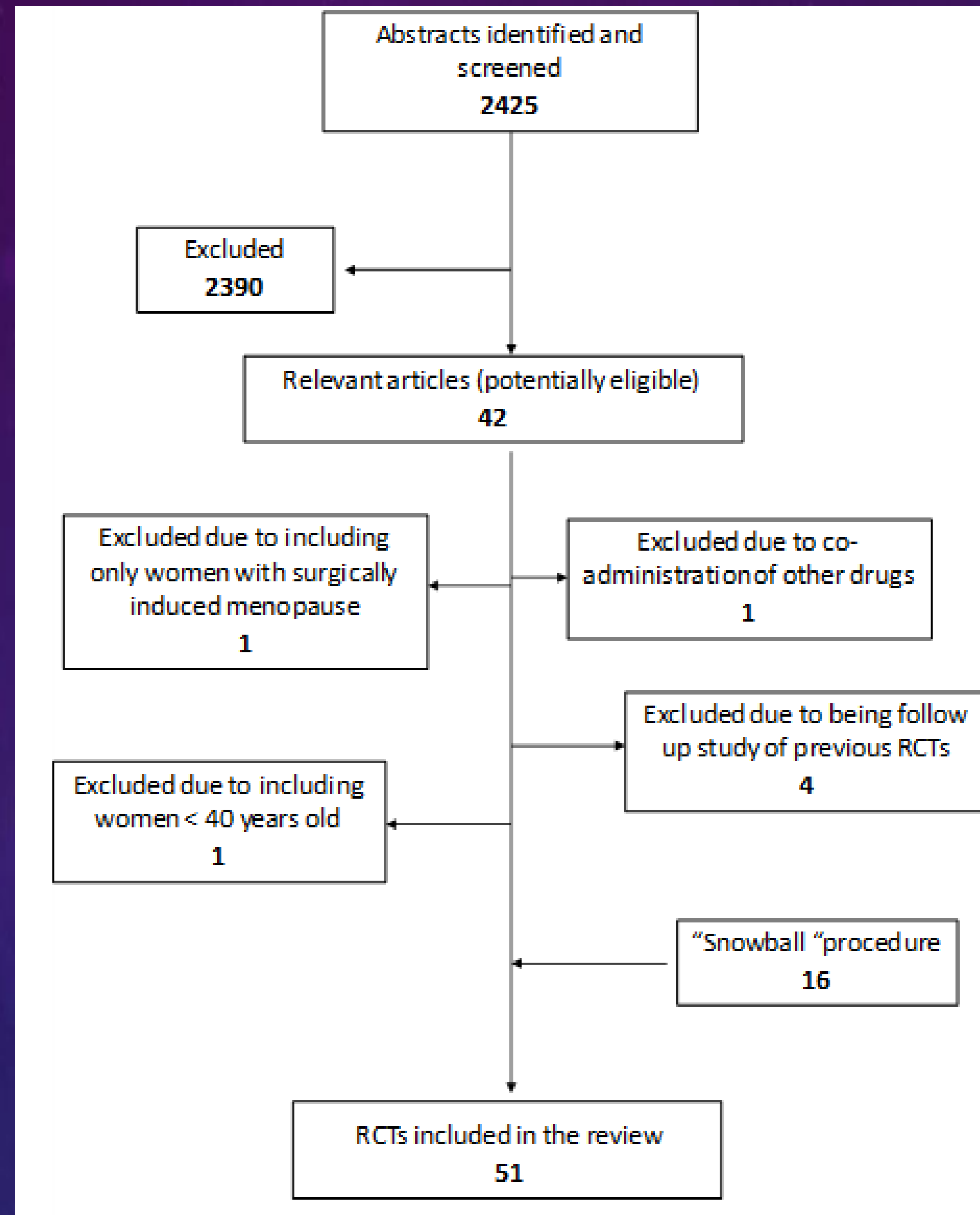
- Data from laboratory and epidemiological studies → beneficial effects of oestrogens and progesterone on cognition in menopausal women
- However methodological insufficiencies
- Systematic review of randomised controlled trials (RCT) to prove the effectiveness of Hormone Replacement Therapy (HRT) on cognitive measures after menopause.

Materials and methods

- Online search on Pubmed, Embase and PsycINFO databases
- 51 RCTs were collected

Main selection criteria were

- Study type had to be a randomised controlled trial (RCT) in English
- Subjects should be perimenopausal or menopausal women, aged 40 years or above
- Hormone replacement therapy should be the intervention studied.
- The end point had to be a measure of cognition e.g. memory, verbal fluency, or the diagnosis or deterioration of dementia of any aetiology or the diagnosis of cognitive impairment of any type



Other confounding factors: obesity, depression, publication bias, heterogeneity

Significant discrepancy noted between RCTs and non-RCTs

CONCLUSION

HRT for the prevention or treatment of cognitive impairment in menopausal women is NOT RECOMMENDED



Results

- Only 6 of the included studies showed a positive effect of HRT on specific cognitive measures.
- 45 RCTs showed ineffectiveness or harmful impact
- Large trials like the Women's Health Initiative showed that HRT **increases** the risk for dementia and cognitive decline
- Cognitive decrements caused by HRT persist even after stopping it
- Socioeconomic background is an important confounding factor
- Timing of initiation of HRT plays a antagonistic role



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