Letters to the editor

Cognitive function and menopausal hormone therapy

Sir,

The subject of cognitive function and the potential role of menopausal hormone therapy (MHT) was addressed by a narrative structured review (Genazzani et al., 2006). This is an important issue, as demographic changes in European populations and worldwide imply that growing numbers of women are potentially prone to the risk of developing cognitive decline including dementia if preventive and therapeutic measures cannot be developed. It is a pity that a Cochrane review on this subject was obviously not considered for this review (Hogervorst et al., 2002). In this systematic review, based on meta-analytic techniques, the authors demonstrated that both estrogen-only (ERT) and estrogen-progestin therapies (EPT) were not beneficial as regards to overall cognitive function of healthy post-menopausal and women with bilateral oophorectomy alike. This review was published before results were available from the Wome’s Health Initiative and Wome’s Health Initiative Memory Study (Shumaker et al., 2003; Espeland et al., 2004; Shumaker et al., 2004; Rapp et al., 2003; Resnick et al., 2006).

Whether there could be a ‘critical window’, regarding age of women, to potentially administer MHT for the benefit of cognition is a highly relevant matter. Hogervorst et al. (2002) assessed 15 double-blind randomized placebo-controlled trials of ERT or EPT, administered for at least 2 weeks to healthy women of any age who had undergone natural or surgical menopause. However, at the time the study was conducted, no trials providing long-term data were available. Nine of these trials included women below the age of 50 years. Thus, there are at least short-term data available regarding effects of exogenous hormones on cognitive function in women as young as 29 years, 33 years, or in their 40s, the latter being included in seven of nine studies. Studies including older women found no evidence of benefit from treatment with MHT as did studies including young(er) women.

At this point in time it would be helpful to synthesize all available trial data, as several large double-blind randomized placebo-controlled trials providing longer-term data are available for data extraction, suitable for a comprehensive review on this subject.


Rapp SR, Espeland MA, Shumaker SA. et al. for the WHIMS Investigators. Effect of estrogen plus progestin on global cognitive function in postmenopausal women. The Women’s Health Initiative Memory Study: a randomized controlled trial. JAMA 2003; 289:2663–72


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Reply: Cognitive function and menopausal hormone therapy

Sir,

The review published in Human Reproduction Update was aimed at reviewing the available data on the central effects of endogenous and exogenous estrogens with significance to female ageing and cognition. Results from basic science studies and from the most relevant clinical trials were cited, their discrepant findings discussed and suggestions made for new research directions (Genazzani et al., 2006).

The evaluation of strategies to analyse the spectrum of cognitive function throughout the menopause transition and during post-menopause is becoming a highly relevant matter in women’s health, since the neuropathological cascade of events contributing to the clinical diagnosis of cognitive impairment and dementia begin many years before the onset of overt memory dysfunction. At the same time, this dichotomy represents one of the most interesting challenges in women’s health in terms of study of midlife therapeutic interventions aimed at modifying later clinical effects.

References
