

Surgical vs Natural Menopause: Cognitive Issues

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ABSTRACT

Objective

Women who undergo both natural and surgical menopause experience the loss of cyclic ovarian production of estrogen, but hormonal and demographic differences distinguish these two groups of women. Our objective was to review published evidence on whether the premature cessation of endogenous estrogen production in women who underwent a surgical menopause has deleterious consequences for cognitive aging and to determine whether consequences differ for women if they undergo natural menopause. Studies of estrogen-containing hormone therapy are relevant to this issue.

Design

We reviewed evidence-based research, including the systematic identification of randomized clinical trials of hormone therapy with cognitive outcomes that included an objective measure of episodic memory.

Results

As inferred from very small, short-term, randomized, controlled trials of high-dose estrogen treatment, surgical menopause may be accompanied by cognitive impairment that primarily affects verbal episodic memory. Observational evidence suggests that the natural menopausal transition is not accompanied by substantial changes in cognitive abilities. For initiation of hormone therapy during perimenopause or early postmenopause when the ovaries are intact, limited clinical trial data provide no consistent evidence of short-term benefit or harm. There is stronger clinical trial evidence that initiation of hormone therapy in late postmenopause does not benefit episodic memory or other cognitive skills.

Conclusion

Further research is needed on the long-term cognitive consequences of surgical menopause and long-term cognitive consequences of hormone therapy initiated near the time of surgical or natural menopause. A potential short-term cognitive benefit might be weighed when a premenopausal woman considers initiation of estrogen therapy at the time of, or soon after, hysterectomy and oophorectomy for benign conditions, although data are still quite limited and estrogen is not approved for this indication. Older postmenopausal women should not initiate hormone therapy to improve or maintain cognitive skills.

Oophorectomy: The Debate between Ovarian Conservation and Elective Oophorectomy

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ABSTRACT

Ovarian cancer remains the fifth deadliest cancer among women because of its early asymptomatic nature and lack of efficacious screening methods, leading to frequent late-stage diagnosis. Elective oophorectomy is an option for women undergoing benign hysterectomy as a means of reducing their ovarian cancer risk. Benefits also include reduced risk



of repeat surgical operation due to adnexal masses and reduced anxiety related to perceived risk of ovarian and breast cancer. The potential negative side effects of elective oophorectomy, such as decreased cognition and sexual function and increased risk of osteoporosis and cardiac mortality, offer support for ovarian conservation. The implications of this elective procedure and the possible consequences without it require physicians to review the pros and cons with patients in light of the patient's individual circumstances and ovarian cancer risk.

Efficacy and Safety of Odanacatib Treatment for Patients with Osteoporosis: A Meta-analysis

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ABSTRACT

The aim of this study was to evaluate the efficacy and safety of odanacatib (ODN) for the treatment of osteoporosis, using data in studies reported in the literature. We performed a literature search to compare the outcomes of applications of once-weekly ODN 50 mg and control. The outcomes of osteoporosis evaluated include primary outcome as bone mineral density (BMD) at different skeletal sites and secondary outcomes, including adverse events (AEs), such as incidence of skin AEs, fracture and serious adverse events (SAEs). Four trials were included. Mean difference (95% CI) of lumbar spine BMD was 3.41 (1.57-5.24) at 12 months and 4.89 (2.72-7.05) at 24 months; mean difference (95% CI) of femoral neck BMD was 1.90 (0.73-3.08) at 12 months and 3.85 (2.55-5.15) at 24 months; mean difference (95% CI) of total hip BMD was 2.65 (1.20-4.09) at 12 months and 3.70 (1.76-5.64) at 24 months; risk ratio (95% CI) of AEs was 0.98 (0.91-1.07); risk ratio (95% CI) of SAEs was 1.11 (0.72-1.72); risk ratio (95% CI) of skin AEs was 0.92 (0.63-1.35) and risk ratio (95% CI) of fracture was 0.34 (0.16-0.70). In this study, application of 50 mg ODN produced significantly greater BMD increases and lower fracture incidence than that of the control. In addition, ODN was generally well tolerated.