Transdermal estradiol and oral or vaginal natural progesterone: bleeding patterns


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Objective To evaluate the effects on bleeding pattern of two different doses of natural progesterone (NP) administered per os or per vagina in association with transdermal estradiol in a continuous, sequential estrogen–progestin therapy.

Methods A prospective, randomized trial was conducted on 100 patients randomized into four groups. Each group received transdermal 17β-estradiol treatment at the dose of 50 μg/day. Groups A and B received NP per os at the dose of 100 mg/day and 200 mg/day, respectively. Groups C and D received NP per vagina at the dose of 100 mg/day and 200 mg/day, respectively.

Results After 12 cycles of treatment, no significant differences were observed in endometrial thickness between groups, suggesting that all treatments are effective in balancing the effects of estradiol on endometrium. Regarding bleeding control, patients in Groups C and D showed a higher number of episodes of regular bleeding than patients in Groups A and B and fewer episodes of spotting. The better control of bleeding was associated with a higher treatment compliance in patients who received vaginal NP, with a larger percentage of women completing the study.

Conclusion Transdermal estrogen replacement therapy combined with 100 mg of micronized NP administered per vagina from the 14th day to the 25th day of each 28-day cycle leads to good cycle control and provides excellent patient satisfaction without serious side-effects. This therapy could be a treatment of first choice in early postmenopausal patients.