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Nomegestrol Acetate and 17β-Estradiol Reduces Menstrual Symptoms, Pain, and Cramps Compared With Drospirenone and Ethinylestradiol

A Pooled Analysis

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INTRODUCTION: Nomegestrol acetate and 17β-estradiol is a novel combined oral contraceptive; the aim of this analysis is to compare the effects of nomegestrol acetate and 17β-estradiol against drospirenone and ethinylestradiol.

METHODS: We pooled analyses from two 1-year, randomized, open-label studies to compare the effects of nomegestrol acetate and 17β-estradiol (2.5 mg and 1.5 mg) and drospirenone and ethinylestradiol (3 mg and 30 micrograms) on menstrual symptoms measured using the Menstrual Distress Questionnaire. Absolute changes from baseline in eight Menstrual Distress Questionnaire domains during the menstrual phase were compared using an adjusted analysis of variance *F*-test. From the pain domain, cramps was also compared at cycles 1, 3, 6, and 13 in women with moderate or severe complaints at baseline using an adjusted mixed model for repeated measurements.

RESULTS: Overall, data from 3,233 nomegestrol acetate and 17β-estradiol and 1,084 drospirenone and ethinylestradiol-treated women were analyzed (n=1,177 [nomegestrol acetate and 17β-estradiol] and n=372 [drospirenone and ethinylestradiol] for pain domain item cramps). Women using nomegestrol acetate and

17β-estradiol had significant improvements in pain, water retention, negative affect, and impaired concentration compared with women using drospirenone and ethinylestradiol and had significant reductions (worsening) in arousal (Table 1). Menstrual cramping scores improved overall in both groups. During the earliest cycles (1 and 3), women in the nomegestrol acetate and 17β-estradiol group demonstrated more significant improvement (cycle 1 mean difference [95% confidence interval] -0.35 [-0.52 to -0.18], *P*<.001; cycle 3: -0.34 [-0.52 to -0.15], *P*<.001).

CONCLUSIONS: Nomegestrol acetate and 17β-estradiol was associated with a significant reduction in menstrual pain and cramps, water retention, negative affect, impaired concentration, and arousal compared with drospirenone and ethinylestradiol.

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The Effect of Postabortion Intrauterine Device Placement on Immediate Postoperative Recovery

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INTRODUCTION: Immediate postabortion intrauterine device (IUD) placement has been shown to be safe and is effective in decreasing repeat abortion. Data are available to counsel patients on expulsion, perforation,

Table 1. Menstrual Distress Questionnaire Domain Changes in Women Using Nomegestrol Acetate and 17β-Estradiol or Drospirenone and Ethinylestradiol

Domain	Mean t-Scores				Estimated Difference Nomegestrol Acetate and 17β-Estradiol–Drospirenone and Ethinylestradiol	
	Nomegestrol Acetate and 17β-Estradiol		Drospirenone and Ethinylestradiol		Δ* (95% CI)	<i>P</i>
	Baseline	Last Measurement	Baseline	Last Measurement		
Pain	55.7	52.3	55.4	55.0	-3.71 (-5.27 to -2.16)	<.001
Water retention	54.3	52.3	53.5	52.2	-1.73 (-3.29 to -0.17)	.03
Autonomic reactions	50.1	51.2	50.4	52.4	-1.22 (-2.60 to 0.15)	.08
Negative affect	54.3	52.3	54.0	53.5	-2.52 (-4.10 to -0.94)	.002
Impaired concentration	53.9	52.3	52.9	53.3	-2.16 (-3.62 to -0.70)	.004
Behavior change	54.1	52.6	54.5	54.0	-1.49 (-2.99 to 0.01)	.05
Arousal (positive domain)	58.3	54.0	57.2	56.1	-3.42 (-4.91 to -1.94)	<.001
Control	51.3	52.8	51.6	52.8	0.02 (-1.26 to 1.30)	.97

CI, confidence interval.

*Mean change in domain scores from baseline to last measurement.

