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Q/ Do progesterone-only contraceptives lead to more mood changes than other types?

EVIDENCE-BASED ANSWER

A/ No. Women taking progesterone-only contraceptives don't appear to experience more depressive symptoms or mood changes than women on other hormonal contraceptives, and they may experience slightly less depression than women using no contraception (strength of recommendation: **B**, multiple homogeneous cohorts).

Lower, or comparable depression scores compared with other methods

A retrospective cohort trial compared 298 women on progesterone-only contraception with 6356 women on other or no contraception to examine the association between contraception use and depressive symptoms.¹

When surveyed with the Center of Epidemiological Studies Depression Scale (using both a 10-question, 30-point questionnaire and a 20-question, 60-point questionnaire), women on progesterone-only contraception demonstrated significantly lower levels of depressive symptoms compared with women using low-efficacy contraception (early withdrawal, spermicides, contraceptive films) or no contraception (mean deviation [MD]=-1.3; 95% confidence interval [CI], -2.4 to -0.2). No significant difference was seen in depression scores when compared with women on other forms of hormonal contraception (MD=-0.3; 95% CI, -1.2 to 0.6).

No significant difference in depression and less anhedonia for nonusers

A cross-sectional, population-based trial conducted by survey in Finland in 1997, 2002,

and 2007 investigated the link between contraception and mood symptoms. It included 759 women using the progesterone-only levonorgestrel-releasing intrauterine system (LNG-IUS) and 7036 women on other forms of contraception or none.²

Current LNG-IUS users vs nonusers had no significant difference in diagnosis of depression, as assessed by asking patients if they had been diagnosed with or treated for depression in the previous year of contraception (8.0% vs 7.3%; $P>.05$); depressive symptoms in the previous year (24% vs 26%; $P>.05$), or psychological illness (1.9% vs 2.5%; $P>.05$).

LNG-IUS users reported significantly less anhedonia than nonusers in the previous year (19% vs 22%; $P<.05$). Moreover, in a partial correlation analysis, LNG-IUS was negatively correlated with anhedonia ($r=0.024$; $P<.05$) and symptoms of depression over the previous month ($r=0.098$; $P<.05$).

Did relationship satisfaction, rather than contraceptive, influence depression?

A multicenter prospective cohort trial analyzed the effect of the levonorgestrel implant on mood in 267 women followed for 2 years by evaluating depressive symptoms reported from the Mental Health Inventory, a 6-item questionnaire scored 0 to 24.³

The women demonstrated a significant increase in depressive symptom scores from 7.9 at baseline to 8.8 ($P=.01$). However, the study authors suggested that relationship satisfaction, not method of birth control, was the cause of depressive symptoms. The 62 women who experienced a decrease in relationship satisfaction exhibited a signifi-

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cant increase in depressive symptoms (6.7-10; $P=.001$) compared with the 156 women who reported an improvement or no change in relationship satisfaction (7.8-8.2; $P=.30$). **JFP**

References

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