

Psychosocial Aspects of Family Planning: Hormonal Contraception and Mood

Overview:

This case discusses possible psychological effects that may be caused by hormonal contraception (HC). The reader should be able to describe how often such changes may occur and what factors may make women susceptible.

Case:

Jessika, a 25 year old nullipara, is recently married and would like to delay childbearing for a few years. After being counseled about various contraceptive options, she decides to start a combined oral contraceptive pill (COC). Three months later, she complains of persistent feelings of depressed mood, irritability and low energy. She has had no other changes in her life and denies significant stressors. She denies any strain in her relationship, and denies alcohol or substance abuse. Medical history is unremarkable except for a diagnosis of depression at age 18 for which she took an antidepressant for one year and then discontinued.

What is the likelihood that her symptoms are caused by the contraceptive?

While the majority of women who start hormonal contraception have no effect or a favorable effect on mood, negative mood changes directly related to use of HC occurs in 2-10% of women. It is important to rule out other causes of depression or dysthymia that may have similar symptoms. If the onset of symptoms occurs soon after the start of HC, though, it is possible that the contraceptive is to blame.

Are certain women susceptible to such changes?

It is difficult to predict which women will experience these side effects. The most reliable predictor of adverse psychological effects is when a woman has had such effects before from using HC. Although some studies have indicated that a history of depression may be a risk factor, this has not been demonstrated consistently.

One study suggested that women of Caucasian or South Asian race are more likely to have such changes than other backgrounds.

Are certain types of COC more likely to cause psychological effects than others?

There is some evidence that more androgenic progestins such as levonorgestrel are more likely to cause such changes when compared to anti-androgenic progestins such as drospirenone. Drospirenone-containing COC is more likely to have a favorable effect on mood, particularly in women with a history of premenstrual dysphoric disorder.

There does not appear to be a difference in symptoms between users of COC that contain different doses of estrogen. However, triphasic COC formulations may have more adverse mood effects than monophasic ones.

Case continued: Jessika's gynecologist discontinues her oral contraceptive, and instead

places a subcutaneous etonogestrel implant. She becomes amenorrheic after a brief period of breakthrough bleeding, but continues to feel sluggish and irritable.

Are progestin-only contraceptives less likely to have mood effects than combined hormonal contraceptives?

Similar rates of depressed mood and mood changes have been reported for both COC and systemic progestins such as depot medroxyprogesterone acetate and the etonogestrel implant. It may be that doses strong enough to suppress ovulation (and therefore inhibit ovarian sex steroid production) are more likely to cause adverse mood effects than lower doses such as the progestin-only pill.

There is little data on mood effects of intrauterine devices containing progestins, but no evidence to suggest that this small amount of hormone would have a psychological effect.

Patient-centered approach

It is important to recognize that mood effects are multifactorial and may not be due to hormonal changes alone. A woman complaining of depressed mood and irritability warrants a more complete exploration of her feelings and limitations. A thorough history of her symptoms, past psychological history, substance use, and social background may reveal other reasons for her mood symptoms.

Women using hormonal contraceptives may also experience improvement in mood, particularly when they have suffered from somatic menstrual symptoms that are relieved by HC, or when they are secure in the knowledge that they are protected from unwanted pregnancy.

Sociocultural considerations:

It may be helpful to explore the patient's reasons for choosing hormonal birth control and whether any pressure was involved in this decision. Women in an abusive relationship may be coerced into using contraception against their wishes, and this may manifest as other negative symptoms. In some cultures, being on a contraceptive may be a source of stigma or shame, which may trigger the report of adverse mood effects.

Key points:

- Adverse mood effects are experienced by a small proportion of women using hormonal contraception
- It is difficult to predict which users will have such an experience, but it may be more pronounced with more androgenic progestins and tricyclic formulations
- Other social and cultural factors may be involved in mood changes, separate from hormonal effects

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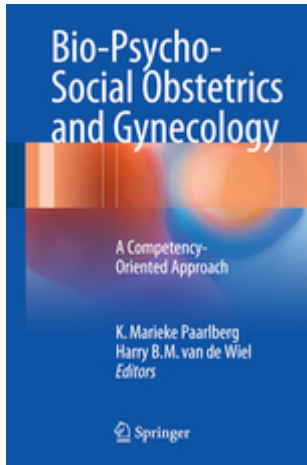
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