

Experts suggest hormonal birth control might cause mood problems.

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Introduction

According to researchers, a rat study suggests that hormonal contraceptives might affect mood, particularly in teens. They also point out that these birth control tablets have a number of advantages, including the ability to manage medical issues and avoid unintended births. It is advised that anybody using contraceptives and experiencing mood swings seek medical attention [1]. In the US, hormonal contraceptives are the most often recommended birth control method. They are used to treat a number of medical disorders, including acne, Polycystic Ovary Syndrome (PCOS), and premenstrual dysphoric disorder, as well as to prevent conception. Hormonal contraceptives, like any drug, have possible advantages as well as potential drawbacks. Some users of hormonal contraceptives experience mood changes or depressive symptoms, among other possible adverse effects. This week's Society of Neuroscience annual conference saw the presentation of a new study that may provide insight into how synthetic hormones used in birth control impact brain growth and the possibility of mood disorders, particularly in adolescence. These findings, which haven't been made public in a peer-reviewed publication, may aid researchers and other members of the public in understanding the dangers associated with hormonal contraception [2].

However, the specialists who talked with Health line also noted the hormonal contraceptives' potential advantages for many teenagers and other users. Users should be informed of any medication's possible benefits and drawbacks, including any associated with hormonal contraceptives. Only the person who needs or wants to use the drug can do the difficult arithmetic required in comparing those possible benefits against risks; a crucial component of that equation is having more scientifically reliable knowledge about reproductive and women's health.

Effects of synthetic hormones on rats

Birth control pills, injections, implants, and certain Intrauterine Devices (IUDs) that contain synthetic progesterone, oestrogen, or both are examples of hormonal contraceptives. Progestins are synthetic variants of progesterone, while estradiol, which has various names, is synthetic oestrogen. The authors of the current study gave young female rats' synthetic progesterone and oestrogen in order to investigate the possible impact of these hormones on teenage brain development. They discovered modifications in the prefrontal cortex of the rats' brains after around three weeks. Prefrontal brain modifications

can impact mood and behaviour. The primary stress hormone in rodents, corticosterone, was likewise generated in greater amounts by the rats given the synthetic hormones [3].

The processes that may underlie hormonal contraceptives and how they can affect behaviour in ways that we can't usually investigate in people can be revealed by studies like this one that report on tests in animals. This study starts to indicate what is possible, but there is still a lot of work to be done before we can start to understand which characteristics of hormonal contraceptives are important for particular behaviours. Hormonal contraceptives do not all work the same. They are delivered in various ways and include various hormone compositions.

Adaptation of studies from rodents to humans

Researchers can control for several factors that are more challenging to maintain constant in human subjects by studying hormonal contraceptives in rats or other animal models. The therapeutic applicability of findings from animal studies may be constrained by human variability and variances in our biological and environmental risk factors for certain health disorders. According to studies, various people are impacted by hormonal contraceptives in different ways in humans. When some people have mood problems while using hormonal contraceptives, others experience mood enhancements or perhaps no changes at all.

The correlations between the use of hormonal contraceptives and mental consequences are often weak, erratic, and unlikely to be causative. On a personal basis, certain hormonal contraceptives might affect a woman's mood, while others are effective for other women. In instance, hormonal contraceptives frequently enhance the mood of those who already have pre-existing mood disorders like PMDD. These contraceptives assist in reducing hormone fluctuations that may exacerbate the symptoms of mood disorders like PMDD [4].

Weighing the risks and possible advantages

All of the medical professionals who talked with Health line stressed the need of weighing both the possible hazards and advantages of hormonal contraceptives for avoiding unintended pregnancies and addressing specific medical disorders in teens and other users. We can't ignore what these drugs have done for young women, even as we learn more about mood, contraception, and the impacts of oestrogen and progesterone. Unplanned pregnancies among teenagers are

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common, and they can have terrible implications that can change the course of a person's life [5]. These are essential drugs that provide young women protection and independence, and they are far safer today than they were in the 1950s. I strongly advise not dismissing this choice out of hand since anything could occur. You must balance the benefits and risks in your entire analysis.

Minimizing mood swings

Newman advises adolescents to get in touch with the doctor who prescribed their hormonal contraception if they have depressive symptoms or other mood problems after starting to use it. Their doctor could suggest switching to a different hormonal contraceptive or another kind of birth control if they are using the hormonal contraceptive to avoid pregnancy. Their healthcare practitioner may suggest an alternative method of managing the mood swings if they are using the hormonal contraception to address PMDD or another medical problem. Even if they experience unwanted mood swings, some teenagers may choose to keep using hormonal contraceptives. Some people cease using hormonal contraceptives but still

have mood swings, which can be brought on by a number of other things outside hormonal contraceptives.

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