
Weight gain is a commonly reported side effect of hormonal contraception. In this paper, the authors present data to suggest that six cycles of combined oral contraception containing 30 µg ethinylestradiol and 2 mg chloromadinone, an anti-androgenic synthetic progesterone derivative, alters body composition – specifically, that it lowers fat mass – when compared with no contraception. Forty-eight healthy women, of normal body mass index (BMI) and regular cycles, attending for contraceptive advice were recruited. Those requesting hormonal contraception (n = 24) were given a six-cycle course of the above preparation; those using natural methods of contraception (n = 24) were recruited to the control group. At each visit, anthropometric measurements were made and multifrequency bioimpedance analysis was used to calculate total body water, extracellular and intracellular body water, fat mass and fat-free mass. Subjects were measured at recruitment, and after the third and sixth cycles; the treatment group were measured on Days 15–18 of their cycle, whereas controls were measured in the follicular phase of their menstrual cycle. No blinding measures are reported.

No significant between-group difference in the above parameters was reported at the point of recruitment (p values not published), nor did there appear to be any longitudinal between-group changes. However, a reduction in fat mass was demonstrated in the treatment group with a 10% reduction from baseline at the third visit, which was statistically significant (p < 0.05), compared with no significant change in the control group.

These findings are of potential clinical interest; BMI is a factor when prescribing oral contraception, and possible weight gain can be a consideration for patient acceptability. These data seem to suggest that not only does this particular preparation of contraception not lead to weight gain, but that there is active reduction in fat mass. However, in this study, limited numbers and potential introduction of bias from factors such as timing of measurements or lack of researcher blinding necessitate further study before clinical practice is altered.

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Approximately 30% of women complain of menorrhagia and tranexamic acid has been used since 1966 for its treatment, as it blocks the activation of plasminogen and therefore prevents the decomposition of fibrin in clotted blood. Due to this mechanism of action, it has been suspected that tranexamic acid might increase the risk of thrombosis. A recent Cochrane Review was unable to comment on the risk of thromboembolic events with antifibrinolytics, although it did note that long-term studies in Sweden have found that the rate of incidence of thrombosis in women treated with tranexamic acid is similar to the spontaneous frequency.

To further investigate the possible link between venous thromboembolism (VTE) and tranexamic acid, the authors of this case-control study used data from the UK General Practice Research Database to examine whether women aged 15–49 years with a diagnosis of menorrhagia had higher rates of incidence of VTE if they had been exposed to tranexamic acid and other drugs used to treat menorrhagia, compared to matched controls.

Although the authors report finding an association between the use of tranexamic acid and VTE from the study data, this was not statistically significant (adjusted odds ratio (OR) 3.20; 95% confidence interval (CI) 0.65–15.78). The authors acknowledge that the study was underpowered and only had a 45% power to detect an odds ratio of 3. The paper also reports finding an association between the use of mefenamic acid (adjusted OR 5.54; 95% CI 2.13–14.40) or norethisterone (adjusted OR 2.41; 95% CI 1.00–5.78) and VTE, however this was not the primary objective of the study and the confidence intervals are again wide.

The authors found that a diagnosis of anemia or a low haemoglobin – taken as a proxy for more severe menorrhagia – was associated with an increased risk of VTE (adjusted OR 2.23; 95% CI 1.02–4.86), and suggest the possibility that menorrhagia itself could be a prothrombotic condition.

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