JOURNAL REVIEW

Progestin-only contraception and venous thromboembolism

Blanco-Molina MA, Lozano M, Cano A, *et al. Thromb Res* 2012;**129**:e257–e262.

Venous thromboembolism (VTE) is uncommon in young, healthy women, but if it does develop, it can be fatal. Combined hormonal contraception (CHC) increases the risk of VTE and should be avoided in women who are already at increased VTE risk. Progestogenonly (PO) preparations are an alternative option, and this paper reviews the published evidence on the risk of VTE associated with PO contraception.

The authors reviewed a number of studies looking at changes in the haemostatic system brought about by progestogens (progestins), and other studies looking at the incidence of VTE in users of PO contraception. They report that progestogens do not cause significant changes

in the haemostatic system, in contrast to the pro-coagulant changes induced by ethinylestradiol in CHC. They also conclude that most of the available evidence demonstrates no significantly increased risk of VTE in users of PO contraception.

Women with thrombophilic disorders are at increased risk of VTE, and estrogen exposure, either in pregnancy or through CHC, is associated with significantly increased risk. However, PO oral contraceptives are not associated with increased risk of VTE in these patients, thus providing a safe option to reliably avoid unwanted pregnancy. Women using anti-coagulation therapy may experience side effects of menorrhagia or corpus luteal bleeding, and PO contraceptives have been used to treat these problems. The available evidence suggests that using PO preparations in this way is effective and safe.

The paper concludes with a review of the World Health Organization (WHO) eligibility criteria for PO contraceptives, and highlights that while a history of VTE is classified as Category 4 for CHCs, it is Category 2 for PO contracentives.

In conclusion, this paper reports that PO contraceptives appear to be a safe choice for women at increased risk of VTE, and are also useful to treat heavy periods in anti-coagulated women. The range of preparations available, including long-acting reversible contraceptives, offer choice to this group of women for whom combined hormonal contraceptives are contraindicated.

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