

Continuous-Use Ethinylestradiol/Levonorgestrel 20µg/90µg as an Oral Contraceptive

A Viewpoint by Camelia Davtyan

Iris Cantor UCLA Women's Health Center,
UCLA Comprehensive Health Program, Los
Angeles, California, USA

When oral contraceptives were first introduced in the 1960s, their design was based on the assumption that women would prefer having monthly vaginal bleeding that would mimic natural menstruation. Since then, decades of behavioural research suggested that there is a subset of women who prefer not to have any vaginal bleeding while using oral hormonal contraception. A national poll in the US found that 60% of women would appreciate not having a period every month and one-third would choose never to have a period.

In May 2007, the US FDA approved ethinylestradiol/levonorgestrel 20µg/90µg as the first combination oral hormonal contraceptive for continuous daily use, without hormone-free days or placebo. According to the manufacturer,^[1] 59% of women taking this formulation had completely stopped bleeding vaginally after 12 months of use. Breakthrough bleeding in the remaining 41% is the main practical problem associated with ethinylestradiol/levonorgestrel 20µg/90µg. However, in a comparative study, the median duration of breakthrough bleeding or spotting in women receiving continuous oral contraception at this dosage was lower than that in women receiving a traditional 21-day regimen at

the same dosage, followed by 7 days' placebo.^[2] Other adverse events are similar to those of traditional combination oral hormonal contraceptives.

There is another subset of women who greatly benefit from pill-induced amenorrhea in order to avoid worsening symptoms of various medical conditions, including endometriosis, anaemia and epilepsy. Off-label use of continuous hormonal contraception for these patients has been prescribed for years.

The hormones used in this contraceptive have been in clinical use for decades and there is a large body of medical research backing their efficacy and safety. Although there are no hormone-free days, the cumulative monthly dose of ethinylestradiol/levonorgestrel in this formulation may actually be equal to or lower than that in many other formulations of oral hormonal contraceptives, given the low dose per tablet.

For the 59% of women who experience no vaginal bleeding after 1 year of continuous use of ethinylestradiol/levonorgestrel 20µg/90µg, this product offers the option of safe contraception without vaginal bleeding, as well as better control of medical conditions in which vaginal bleeding leads to worsening symptoms. ▲

References

1. Wyeth Pharmaceuticals Inc. Lybrel™ (90 mcg levonorgestrel and 20 mcg ethinyl estradiol) tablets; prescribing information [online]. Available from URL: <http://www.wyeth.com>
2. Teichmann AT, Kluft C, Grubb G, et al. Comparative trial of continuous-use and 21-day cyclic levonorgestrel and ethinyl estradiol oral contraceptive [abstract]. *Obstet Gynecol* 2006 Apr; 107 (4 Suppl.): 12S