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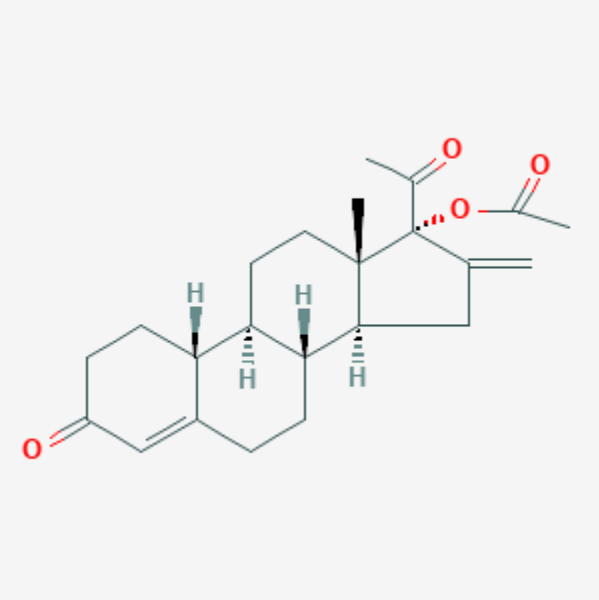
Segesterone Acetate

Revised: September 15, 2023.

CASRN: 7759-35-5



Drug Levels and Effects

Summary of Use during Lactation

Based on the available evidence, expert opinion in the United States holds that postpartum women who are breastfeeding should not use combined hormonal contraceptives during the first 3 weeks after delivery because of concerns about increased risk for venous thromboembolism and generally should not use combined hormonal contraceptives during the fourth week postpartum because of concerns about potential effects on breastfeeding performance. Postpartum breastfeeding women with other risk factors for venous thromboembolism generally should not use combined hormonal contraceptives until 6 weeks after delivery.[1,2] World Health Organization guidelines are more restrictive, stating that combined oral contraceptives should not be used in nursing mothers before 42 days postpartum and the disadvantages of using the method generally

outweigh the advantages between 6 weeks and 6 months postpartum.[3] A decrease in milk supply can happen over the first few days of estrogen exposure.[4]

Drug Levels

Maternal Levels. Six postpartum women who were breastfeeding their infants were given subdermal implants containing 20 mg of segesterone acetate. Paired milk and plasma samples were obtained at about 2 weeks after insertion and at 10-day intervals for up to 2 additional times. Among 13 milk samples, the mean segesterone concentration was 37.5 ng/L (range 7 to 73 ng/L).[5]

Sixty-six postpartum women who were fully breastfeeding their infants were given subdermal implants containing 50 mg of segesterone acetate. A breastmilk sample was obtained at 75 days post-insertion from 24 of the women. The average milk level was 138 ng/L (range 73 to 237 ng/L).[6]

One hundred postpartum women who were fully breastfeeding their infants were given subdermal implants containing 80 mg of segesterone acetate at 55 to 60 days postpartum. The implants released about 100 mcg of segesterone acetate daily. Breastmilk samples were obtained from 14 of the women once weekly for the first month after implant insertion, then every 2 weeks until weaning. Milk segesterone levels ranged from 20 to 50 ng/L. The authors estimated that the dose transferred to the infant, assuming a daily intake of 800 mL of milk, was about 50 ng daily in the first month after insertion, decreasing to around 20 ng daily thereafter.[7]

Infant Levels. Sixty-six postpartum women who were fully breastfeeding their infants were given subdermal implants containing 50 mg of segesterone acetate. An infant blood sample was obtained at 75 days post-insertion from 25 of the infants. The average infant serum level was 7 ng/L (range <5 to 20 ng/L).[6]

Effects in Breastfed Infants

Relevant published information on segesterone acetate and ethinyl estradiol vaginal insert was not found as of the revision date. Studies on the use of segesterone acetate implants have found no adverse effects on growth and development.[6,7]

Effects on Lactation and Breastmilk

Relevant published information was not found as of the revision date.

Alternate Drugs to Consider

Etonogestrel, Intrauterine Copper Contraceptive, Oral Levonorgestrel, Intrauterine Levonorgestrel, Levonorgestrel Implant, Medroxyprogesterone Acetate, Norethindrone, Progesterone

References

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3. World Health Organization. Medical Eligibility Criteria For Contraceptive Use: Fifth Ed. 2015. Available at: http://www.who.int/reproductivehealth/publications/family_planning/MEC-5/en/
4. Moses-Kolko EL, Berga SL, Kalro B, et al. Transdermal estradiol for postpartum depression: A promising treatment option. Clin Obstet Gynecol 2009;52:516-29. PubMed PMID: 19661765.
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6. Coutinho EM, Athayde C, Dantas C, et al. Use of a single implant of elcometrine (ST-1435), a nonorally active progestin, as a long acting contraceptive for postpartum nursing women. Contraception 1999;59:115-22. PubMed PMID: 10361626.
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Substance Identification

Substance Name

CAS Registry Number

7759-35-5

Drug Class

Breast Feeding

Lactation

Milk, Human

Contraceptive Agents, Female