

Contents lists available at ScienceDirect

International Journal of Women's Dermatology



Therapeutic Pearls

Clinical pearl: Expanding knowledge of emergency contraception among dermatologists



Jessica Wu BA^a, Yasmin Qaseem MD^b, Ron Birnbaum MD^b, Jan Smogorzewski MD^{b,*}

- ^a David Geffen School of Medicine, University of California, Los Angeles, CA, United States
- ^b Division of Dermatology, Harbor-UCLA Medical Center, Los Angeles, CA, United States

ARTICLE INFO

Article history: Received 27 March 2020 Received in revised form 20 June 2020 Accepted 24 June 2020

Keywords: Contraception Emergency Teratogen Pregnancy Prevention

ABSTRACT

Dermatologists prescribe teratogenic or potentially teratogenic medications to treat a variety of skin diseases, including spironolactone for hormonal dysregulation in hidradenitis suppurativa or isotretinoin for severe acne. Although contraceptive options are regularly discussed, dermatologists must also be familiar with emergency contraceptive methods in the case that patients receiving teratogenic medications engage in unprotected sexual intercourse and do not desire pregnancy. A lack of knowledge regarding emergency contraceptive options may represent a practice gap for dermatologists.

© 2020 Published by Elsevier Inc. on behalf of Women's Dermatologic Society. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Clinical problem

The rate of contraceptive use among women receiving teratogenic medications is low, with one study documenting a contraceptive provision rate of 28.6% (Stancil et al., 2016). This number should be alarming to dermatologists, who are among the subspecialists most frequently prescribing teratogenic medications, such as isotretinoin, mycophenolate mofetil, and spironolactone (Stancil et al., 2016). One study examining isotretinoin risk reduction counseling found that patients understood the teratogenicity of isotretinoin but had less clarity about effective contraceptive methods (Werner et al., 2014).

The most commonly used contraceptive regimen for patients on iPLEDGE is condoms with oral contraceptive pills (OCPs), yet one study found that 31% of women had intercourse at least once using one or fewer forms of contraception, and 39% reported missing pills in the previous month (Collins et al., 2014). Dermatologists should be familiar with the various emergency contraception (EC) options if they prescribe teratogenic medications, given the possibility of a patient reporting unprotected intercourse in the setting of inconsistent OCP use.

Therapeutic solution

EC options include the copper intrauterine device (IUD), oral ulipristal acetate, and oral levonorgestrel (Cleland et al., 2014). A copper IUD is the most effective EC option, with a <0.1% pregnancy rate if inserted within 5 days after unprotected intercourse (Cleland et al., 2014). Ulipristal acetate is available by prescription as a single dose of 30 mg and results in a 0.9% to 2.1% pregnancy rate if taken within 72 hours after unprotected intercourse (Cleland et al., 2014). Oral levonorgestrel, which is available without prescription, is taken as a single 1.5 mg dose and leads to a 0.6% to 3.1% pregnancy rate when taken within 72 hours after unprotected sex (Cleland et al., 2014). All EC pills should be taken as soon as possible after unprotected intercourse.

First-line EC depends on patient factors and access. Women who weigh >165 lbs should use levonorgestrel only if they have a difficult time obtaining a ulipristal prescription or referral for IUD placement; the pregnancy rate for women with a body mass index of $\geq 30 \text{ kg/m}^2$ who use levonorgestrel as EC is 5.8%, compared with 2.6% for those who take ulipristal (Cleland et al., 2014). The mechanism for decreasing hormonal contraceptive efficacy with increasing body mass index has yet to be elucidated, but one pharmacokinetic study demonstrated that, compared with their normal-weight counterparts, obese women taking a low-dose OCP containing levonorgestrel took a longer time to achieve steady-state levonorgestrel concentration (Edelman et al., 2009). There are no contraindications to EC use, and even women who

^{*} Corresponding author.

E-mail address: Jan.smogorzewski@lundquist.org (J. Smogorzewski).

are precluded from OCP use due to conditions such as migraines can safely use EC. Women who use ulipristal while breastfeeding should pump and discard their supply for 1 week afterward (Cleland et al., 2014). Side effects of ECs are mild, limited to initial cramping and heavier periods with copper IUD insertion and nausea with levonorgestrel or ulipristal use (Cleland et al., 2014).

Women who do not choose the copper IUD for EC should be offered a highly effective ongoing contraceptive method at the time of EC prescription, such as depot medroxyprogesterone acetate or the etonogestrel implant. Some dermatologists are trained to insert implants (Collins et al., 2014), but IUD insertion requires referral.

Conclusion

Dermatologists must be knowledgeable about various EC methods so that patients who report unprotected intercourse and do not desire pregnancy may be promptly referred for a prescription or IUD placement.

Conflicts of interest

None.

Funding

None.

Study Approval

The author(s) confirm that any aspect of the work covered in this manuscript that has involved human patients has been conducted with the ethical approval of all relevant bodies.

References

- Cleland K, Ramond EG, Westley E, Trussell J. Emergency contraception review: evidence-based recommendations for clinicians. Clin Obstet Gynecol 2014;57 (4):741–50.
- Collins MK, Moreau JF, Opel D, Swan J, Prevost N, Hastings M, et al. Compliance with pregnancy prevention measures during isotretinoin therapy. J Am Acad Dermatol 2014;70(1):55–9.
- Edelman AB, Carlson NE, Cherala G, Munar MY, Stouffer RL, Cameron JL, et al. Impact of obesity on oral contraceptive pharmacokinetics and hypothalamic-pituitary-ovarian activity. Contraception 2009:80(2):119–27
- ovarian activity. Contraception 2009;80(2):119–27.

 Stancil SL, Miller M, Briggs H, Lynch D, Goggin K, Kearns G. Contraceptive provision to adolescent females prescribed teratogenic medications. Pediatrics 2016;137
- Werner CA, Papic MJ, Ferris LK, Lee JK, Borrero S, Prevost N, et al. Women's experiences with isotretinoin risk reduction counseling. JAMA Dermatol 2014;150(4):366–71.