The Role of Oral Contraceptive Pills in the Acne Treatment Plan

When OCPs are the right choice for patients.

WITH JULIE HARPER, MD; ANDREW KRAKOWSKI, MD; LINDA STEIN GOLD, MD; AND JOSHUA ZEICHERNER, MD

Oral contraceptive pills (OCPs) can be an effective treatment option for women with acne, but understanding the risks and identifying the ideal candidates for therapy is essential. Ahead, experts discuss when OCPs are the right choice, which patients are ideal candidates, barriers to treatment, and the importance of patient education and screening.

When are oral contraceptive pills best indicated in the treatment of acne? Who is the right candidate for treatment?

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continues at home with the patient’s family in addition to the conversation in his office.

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Oral contraceptives can benefit any woman with acne who does not have a contraindication, says Julie Harper, MD, Clinical Associate Professor of Dermatology at the University of Alabama-Birmingham. For the treatment of acne, Dr. Harper says the birth control pill must be a combination pill, combining estrogen and a progestin, adding that it is advised that dermatologists not incorporate OCPs in the treatment plan for their youngest patients. Treatment with OCPs should be delayed until two years after menarche.

“Aside from potential risks, the biggest negative of an OCP for acne is that the treatment is long-term,” Dr. Harper explains. “Therefore, these treatments are best for women...
who also desire contraception and who will plan to remain on the OCP for long periods of time.”

Joshua Zeichner, MD, Director of Cosmetic and Clinical Research at Mount Sinai Hospital’s Department of Dermatology agrees that OCPs are a good option for female patients who are suffering from acne that is resistant to traditional treatments and who also desire contraception.

**Oral contraceptives have long been a treatment option for the treatment of acne for the right female patients, but is this treatment option used enough in dermatology? Why?**

There are several FDA-approved OCPs for acne, and OCPs offer a treatment option that does not contribute to antibiotic resistance. Therefore, Dr. Harper says dermatologists should consider prescribing more OCPs for acne. “They are overlooked because dermatologists don’t always know how to properly prescribe them, how to counsel patients about risks and benefits, and prescribers have misconceptions about what type of work-up needs to take place prior to initiating treatment with OCPs,” she explains.

Dr. Stein Gold agrees that many dermatologists are uncomfortable prescribing combined oral contraceptives for acne. “There are a number of contraindications and special circumstances that must be reviewed prior to prescribing,” she says, adding that a pap smear and exam are not required prior to initiating therapy.

Dr. Zeichner says he thinks only a minority of dermatologist are actually writing prescriptions for birth control pills for the treatment of acne. “Many are not familiar with either the branded or generic products or may not feel comfortable with the potential risks associated with the pills. It may be easier for the dermatologist to refer the patient to the gynecologist, which is why they are not writing for birth control pills themselves.”

**What are some of the greatest barriers to prescribing this treatment? Are patients concerned about side effects or risks? If so, which risks/side effects do patients most often voice concern about?**

One major barrier to the use of OCPs may be the personal beliefs of the patients and their families, Dr. Krakowski says. “It is a big responsibility to commit to a ‘systemic’ medication that you must take for not just a few weeks or months but, potentially, years. Knowing that the medication acts as a hormone that alters other aspects of your ‘normal’ physiology raises obvious questions and concerns, most of which can be assuaged with a good heart-to-heart,” he says.

Dr. Zeichner sees the same barriers in his practice. “Many women are concerned with the idea of long-term treatments with any medication. They may be opposed to the use of hormones that may affect their bodies, as well as the potential side effects including change in mood, weight gain, or breast tenderness,” he explains.

Weight gain, in particular, is concerning to most patients, the respondents concur. “Patients should be reassured that OCPs should not cause major shifts in weight either up or down,” Dr. Harper says.

Another significant barrier is medico-legal concerns that get attached to writing the prescriptions for OCPs, says Dr. Krakowski. Some physicians are concerned about the risk of a patient having a stroke or developing breast cancer. “I am not down-playing the risk here (although I feel, personally, that it is overblown). However, OCPs are one of the most studied medications known to human beings. Decades of use within a particularly vulnerable population have led me to feel very safe in regard to prescribing them. I tend to consult my OB/GYN or hematology colleagues whenever

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**OCPs FDA-Approved for Acne**

The FDA has approved the following types of birth control for acne:

- Ortho Tri-Cyclen (norgestimate/ethinyl estradiol)
- Estrostep (norethindrone acetate/ethinyl estradiol)
- YAZ (drospirenone/ethinyl estradiol)
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there is a red flag, but for the most part I have no trouble prescribing OCPs on my own,” he says.

How do you educate patients about potential side effects and risks to ensure they understand the risk-benefit ratio and the efficacy of this treatment?

It is always important to discuss the risks and benefits of a particular medication in detail with your patient, Dr. Zeichner says, and he advises that dermatologists should also be sure to document the discussion in the patient chart.

“I go through a laundry list of potential side effects including breast tenderness, irregular periods, as well as some of the rare side effects including mood disturbance and weight gain,” he offers. “It is important to educate patients on special warnings like clot risks so they understand how and why they are labeled in the package insert of a medication.”

“Many patients have seen commercials about the risk of blood clots,” adds Dr. Stein Gold. She tries to overcome this barrier by educating that in appropriate patients the risk is very low and, in fact, much lower than the risk in pregnant or post-partum patients.

Dr. Harper also talks to her patients about the risks of venous thromboembolism (VTE). “I tell them that their baseline risk of having a VTE is about three per 10,000 women in one year. I explain that taking a birth control pill does double the risk to six per 10,000 women in one year.

OCPs that contain the progestin drospirenone are associated with a triple risk (nine per 10,000 women in one year). If a woman becomes pregnant, her risk is 12 per 10,000 women in one year,” Dr. Harper says.

Dr. Harper also ensures that her patients do not smoke, do not have migraine headaches, and do not have hypertension and that they understand that all of those factors increase the risks of a birth control pill.

What standard screening/history do you take to make sure patients are the right candidates for treatment?

Dr. Krakowski starts with a straight-forward history that screens for increased risk. He explains his approach: “I base my questions on the screening questions utilized by World Health Organization and call out this fact, which usually helps to put parents at ease—an organization that well-known must be doing something right!

“First, I get a thorough ‘current medication’ history that includes herbal supplements and complementary medications and review any known medical conditions for possible known complications with OCPs. Then, I go into a ‘let’s get through the standard checklist’ mode and ask about the date of the patient’s first menstrual cycle (i.e., age of menarche), last menstrual cycle, history of breast cancer, hypertension, stroke, family history of heart attack and clotting issues (specifically, in both the chest and legs), diabetes, liver disease, known Factor V Leiden deficiency in the family, and any history of migraines with aura. The ‘checklist’ is crucial to my method, because it standardizes the process, which helps me remember to ask all the questions and it helps to calm the patient and family to the process of initiating this new treatment. It’s as if they can reason, ‘Well, if Dr. K can rattle off the questions this thoroughly then we must not be the first people doing this in his clinic.’

“Next, I usually incorporate an affirmative statement into the discussion to the effect of ‘And, of course, you cannot smoke while on OCPs. Oh, you don’t smoke? Great, don’t start!’ I end with confirmation that the patient is not currently breast-feeding or pregnant or trying to become pregnant and that she understands that OCPs do not protect a person or partner from sexually transmitted infections like HIV.

The WHO OCP Eligibility Checklist

Access the full World Health Organization criteria for contraceptive use and see the checklist online.

apps.who.int/iris/bitstream/handle/10665/181468/9789241549158_eng.pdf?sequence=1
“After all that, I then explain, ‘Well, you made it through the World health Organization’s screening process to start birth control pills. Now, you have to pass my two tests. I have to get you to pee in a cup to prove you are not pregnant, and I have to take your blood pressure to get your baseline. Do it for the lawyers, please.’

“Once all that is finished, I provide a handout that gives alternative ‘start’ methods to the patients for initiating their OCPs.”

Dr. Zeichner stresses that it’s important to know the patient’s age, smoking history, history of breast or ovarian cancer, history of migraines, and history of any clotting disorders.

Dr. Harper says it’s important to document blood pressure in the chart, and, as stated above, to take a thorough patient history, including asking about a history of smoking, migraine, and hypertension.

If prescribing oral contraceptives to minors, how do you involve parents/guardians in the overall treatment plan?

Dr. Stein Gold says she does not prescribe oral contraceptives to minors who are not sexually active. “If patients have not had an exam, I refer them to GYN. I will write the initial prescription but I do mandate that that they follow up with GYN,” she adds.

“I try to encourage an open discussion between the patient and the parent to make sure that everyone is on the same page,” Dr. Zeichner offers.

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“This can be difficult,” Dr. Harper says. “Explaining that OCPs are an FDA-approved hormonal treatment for acne can help. Also emphasizing the positive attributes of OCPs like regulation of the menstrual cycle and even protection against some malignancies like colorectal cancer and ovarian and uterine cancer can help.”

Dr. Krakowski explains that parents come with their own psychosocial baggage, and that often the misperception that “OCPs lead to sex” may come into play. However, patient—and parent—education can go a long way in alleviating some of these concerns.

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“I have to say that dads tend to get a bad rap in all of this. I have seen plenty of fathers who want only what is best for their daughters and are open to discussing the available treatment options,” he says. “It really is mostly an issue of education.”

Acne isn’t the only dermatologic disease associated with androgen levels. In the latest edition of Ask an Expert, host Adam Friedman, MD learns from Bethanee Schlosser, MD, PhD about hyperandrogenism, the approach to assessment, and possible treatment options, including oral contraceptive pills. Watch now: DermTube.com/series/ask-an-expert