

# Oral Contraceptives Tackle Tough Acne in Some

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CHICAGO – Patients with severe acne are missing out on the skin-clearing benefits of oral contraceptives and need to know that OCs can be prescribed for acne without a pelvic examination by a gynecologist, according to Dr. Bethanee Schlosser.

“When talking to teens and their parents, it’s important to explain that a pelvic exam is not necessary before giving these medications to young women,” she said.

It appears that patients aren’t privy to this information, and are reluctant to ask for oral contraceptives as acne medication. “That may be the biggest hurdle keeping these patients from getting adequate treatment for their acne,” she said.

In 2004, the World Health Organization released guidelines stating that pelvic exams and Pap smears are no longer required before administering combination oral contraceptives.

Dr. Schlosser noted, however, that she does ask all of her female patients when they had their last full gynecologic exam, Pap smear included, and encourages them to stay current.

Three combination oral contraceptives are approved for the treatment of acne in women in the United States: ethinyl estradiol and norgestimate (Ortho Tri-Cyclen), ethinyl estradiol and norethindrone (Estrostep), and ethinyl estradiol and drospirenone (Yaz).

Drospirenone, an analogue of spironolactone, reduces sebum production and increases sex hormone-binding globulin, thus reducing circulating androgens, Dr. Schlosser said.

“Some women will come to me, though, and say that their ob.gyn. has told them they can’t take any pill containing drospirenone or spironolactone,” because of its possible effect on potassium levels, especially in combination with other drugs that increase serum potassium (ACE inhibitors, angiotensin receptor blockers, potassium-sparing diuretics, heparin, aldosterone antagonists, and nonsteroidal anti-inflammatories).

Dr. Schlosser pointed to a 2009 study of 27 women with either severe papular or nodulocystic acne who were treated with a combined oral contraceptive containing 30 mg ethinyl estradiol, 3 mg drospirenone, and 100 mg spironolactone. None of the patients had a significant elevation in serum potassium level; there were no reports of adverse events serious enough to require discontinuation of treatment. At follow-up, 85% of subjects were entirely clear of acne lesions or had excellent improvement, 7% were mildly improved, and 7% were not improved (J. Am. Acad. Derm. 2008;58:60-2).

A 2008 study looked only at the risk of hyperkalemia among 22,429 women who used the drospirenone-containing contraceptive, compared with 44,858 who

used other oral contraceptives. (Contraception 2008;78:377-83). There was no significant between-group difference in the incidence of hyperkalemia.

This type of treatment is not an overnight acne cure, Dr. Schlosser stressed. “I tell women you have to allow at least three cycles of use before you start to judge efficacy. Patients can continue to get more benefit from 3-6 months of use, too.”

A 2007 Cochrane review of the three Food and Drug Administration–approved acne-fighting oral contraceptives found no significant differences in effectiveness, she said.

Elevated androgens are a large contributor to acne in women, and both the estradiol and progestins in combination oral contraceptives work to decrease them, said Dr. Schlosser, director of the women’s skin health program at North-

western University, Chicago. Androgen testing may be appropriate for some women.

“If a woman complains of sudden onset of acne, or acne that is severe or recalcitrant to traditional therapy, I would say testing is a good idea. You might also consider it for women with androgenic features—hirsutism, deep voice, muscular habitus, or androgenic alopecia,” she said.



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#### Important Safety Information

##### Contraindications

Humalog is contraindicated during episodes of hypoglycemia and in patients sensitive to Humalog or one of its excipients.

#### Important Safety Information, continued

##### Warnings

Humalog differs from regular human insulin by its rapid onset of action as well as a shorter duration of action. Therefore, when used as a mealtime insulin, Humalog should be given within 15 minutes before or immediately after a meal.

Due to the short duration of action of Humalog, patients with type 1 diabetes also require a longer-acting insulin to maintain glucose control (except when using an insulin pump).

Glucose monitoring is recommended for all patients with diabetes.

The safety and effectiveness of Humalog in patients less than 3 years of age have not been established. There are no adequate and well-controlled clinical studies of the use of Humalog in pregnant or nursing women.

**Starting or changing insulin therapy should be done cautiously and only under medical supervision.**



Because these features can also be symptoms of polycystic ovary syndrome, Dr. Schlosser also suggested checking for acanthosis nigricans, central obesity, irregular menses, and infertility.

Androgen testing is most informative when performed at the onset of menses. "This is because androgen secretion follows the same pattern as estradiol, which peaks in midcycle and falls to a nadir at the beginning of menstruation," Dr. Schlosser said.

"I print out a lab request, and tell the patient to have her blood drawn on the first day of her period." Morning testing

is better, if possible, because of the hormone's diurnal secretion.

Total testosterone is the most sensitive test for androgen levels in women with acne. However, "it's important to note that the levels associated with acne can be elevated compared to controls, but still within the normal reference ranges," she said. Total testosterone level can also be falsely elevated in obese women, "because insulin reduces the liver's secretion of sex hormone-binding globulin," she said.

There are some contraindications to the use of oral contraceptives for the

treatment of acne, Dr. Schlosser noted. Hypercoagulability, a history of venous thromboembolism (VTE), stroke, coronary artery disease, any gynecologic cancer, uncontrolled hypertension, abnormal liver function tests, pregnancy, or abnormal vaginal bleeding should be considered before prescribing.

Oral contraceptives do increase the risk of venous thromboembolism, although that risk is highly dependent on other factors as well, including advancing age and tobacco use. Dr. Schlosser said a concrete, direct link between oral contraceptives and VTE risk has yet to

be found, but he hopes an ongoing case-control study of more than 50,000 oral contraceptive users (including up to 5 years of follow-up data) will provide answers.

Finally, Dr. Schlosser added, the single greatest risk of VTE among women is pregnancy and the postpartum period. "So I would say if you're treating acne in a woman of childbearing age with an oral contraceptive, you are also protecting her from the biggest risk factor she has for thromboembolic events."

Dr. Schlosser said she had no relevant financial disclosures. ■



#### Important Safety Information, continued

##### Warnings, continued

##### Hypoglycemia

Hypoglycemia is the most common adverse effect associated with insulins, including Humalog. Hypoglycemia can happen suddenly, and symptoms may be different for each person and may change from time to time. Severe hypoglycemia can cause seizures and may be life-threatening.

##### Other Side Effects

Other potential side effects associated with the use of insulins include: hypokalemia, weight gain, lipodystrophy, and hypersensitivity. Systemic allergy is less common, but may be life-threatening. Because of the difference in action of Humalog, care should be taken in patients in whom hypoglycemia or hypokalemia may be clinically relevant (eg, those who are fasting, have autonomic neuropathy or renal impairment, are using potassium-lowering drugs, or taking drugs sensitive to serum potassium level).

#### Important Safety Information, continued

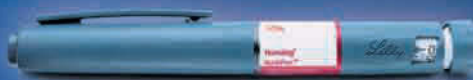
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