



Balancing Dermatological and Gynecological Considerations:

Evaluating the Necessity of Pelvic Exams in OCP Prescriptions for Acne Management

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Introduction

OCPs and Acne Treatment

- **Hormonal Mechanism:** OCPs reduce androgen levels, decreasing sebum production and preventing acne lesions¹
- **Efficacy:** Triphasic OCPs (ethinyl estradiol and norgestimate) show over a 50% reduction in acne lesions, with other combinations (EE and drospirenone) achieving a 66.8% reduction and high patient satisfaction^{2,3,4}
- **Safety:** Generally safe with minimal serious risks; common side effects (mild nausea, headaches) are often temporary.
- **Benefits vs. Risks:** Many dermatologists believe acne treatment benefits outweigh risks, especially with newer OCP generations⁵

Controversy Over Routine Pelvic Exams

- Historically required to screen for cervical cancer and STIs, though guidelines now question their necessity for acne treatment.
- Pelvic exams can cause discomfort, stress, and false positives, leading to unnecessary interventions (biopsies, colposcopies) and increased patient anxiety^{6,7,8}
- Studies show poor agreement among physicians on pelvic findings, questioning exam reliability in acne treatment⁹

Cancer and STI Risks

- Long-term OCP use (5+ years) has been linked to higher cervical cancer risk; however, the direct link between OCPs and STIs remains unclear^{10,11,12}

ACOG and CDC now question routine pelvic exams for OCPs prescribed for acne, as noninvasive STI screening (e.g., urine tests) reduces the need for these exams. This analysis examines whether routine pelvic exams improve acne treatment or add unnecessary burdens. It also advocates for personalized, risk-based strategies to better align dermatologic and gynecologic care guidelines.

Hormonal Acne and OCPs

- OCPs reduce acne severity by stabilizing hormonal fluctuations.
- Combined estrogen-progestin OCPs (COCs) are the most effective and only FDA-approved oral contraceptives for acne treatment.
- **Luteal Phase Hormonal Surge:** During the menstrual cycle's luteal phase, increased androgens (testosterone, androstenedione) boost sebum production, leading to follicular blockage and acne-causing bacteria proliferation¹³
- **Progestin's Role:** Progestins (e.g., levonorgestrel, desogestrel, drospirenone) reduce ovarian androgen production by suppressing luteinizing hormone; certain progestins have anti-androgenic effects on the skin¹⁴
 - Progestin-Only Pills have less predictable effects on acne. Some, like norethisterone, can worsen acne by stimulating sebum production¹⁴
- **Estrogen's Role:** Estrogen in COCs raises sex hormone-binding globulin (SHBG) levels, which binds free testosterone, decreasing its availability for sebum production¹⁵
- **Clinical Effectiveness:** COCs significantly reduce both inflammatory and non-inflammatory acne lesions. A meta-analysis showed noticeable improvement within 3-6 months, with one reporting a 40% reduction in lesion counts and 80% of participants reporting improved self-assessments^{16,17}
- **OCPs vs. Antibiotics:** OCPs are as effective as antibiotics for long-term acne management without bacterial resistance concerns, as they target hormonal causes rather than just reducing bacterial load¹⁸



Figure 1. Hormonal acne distribution

Role of Routine Pelvic Exams in OCP Prescriptions

- **Origins of Pelvic Exams with OCPs:** Pelvic exams with OCP prescriptions were initially aimed to address gynecological risks (e.g., cervical cancer, STIs) for contraception users, ensuring they received regular Pap smears and STI testing¹⁹
- **ACOG Guidelines:** Pelvic exams are unnecessary for asymptomatic, healthy women starting OCPs unless specific risk factors exist. Studies show women obtaining OCPs without exams (e.g., from Mexican pharmacies) maintain similar Pap and STI screening rates as U.S. patients²⁰
- **CDC Recommendations:** Pelvic exams are suggested only for women with certain risks like pregnancy, IUD use, or a history of STIs²¹
- **Impact on Dermatological Care:** Supported by personalized screening, discontinuing routine pelvic exams for acne-related OCP prescriptions may improve access to care without compromising gynecological health.
- **Considerations for Acne Patients:** Routine pelvic exams offer limited benefit for women using OCPs for acne, potentially causing unnecessary discomfort, especially for younger or non-sexually active women²²



Figure 2. Combined Oral Contraceptive Pill Pack

Critique of Routine Exams in Dermatological Patients

- **Routine Exams and Acne Management:** No evidence shows that routine pelvic exams improve acne treatment with OCPs. Estrogen-mediated sebum suppression, key to acne management, occurs independently of pelvic exam findings²³
- **ACP Guidelines:** The American College of Physicians (ACP) advises against performing screening pelvic exams in asymptomatic patients, noting that they can lead to misdiagnosis, overtreatment, and related complications²⁴
- **Patient Impact:** Pelvic exams can cause significant anxiety, embarrassment, and discomfort, leading to communication gaps. In a survey of 6,508 women, 47% found exams embarrassing, 35% painful, and 19% traumatic; only 43% would report discomfort²⁵
- **Emotional Distress:** Many patients report distress from pelvic exams. For those with chronic pain or trauma history, exams can worsen discomfort, underscoring the need for a trauma-informed approach^{26,27}
- **False Positives and Costs:** Routine pelvic exams lead to false positives and unnecessary follow-ups, increasing costs and psychological strain without added benefit for asymptomatic patients²⁸
- **Guideline Shift:** Updated guidelines recommend pelvic exams only for symptomatic patients. Dropping unnecessary exams in acne treatment would reduce anxiety, streamline care, and lower costs, aligning with evidence-based, patient-centered care²⁹

Personalized Approach to Pelvic Exams

- **Personalized Pelvic Exams for Acne Patients:** A tailored approach to pelvic exams strengthens doctor-patient relationships, reducing unnecessary procedures and prioritizing patient comfort and safety.
- **Patient-Centered Care:** OB/GYNs can optimize care by considering sexual activity and family history. Routine pelvic exams may be unnecessary for non-sexually active or asymptomatic patients but may be needed for high-risk individuals.
- **Clinical Symptom-Driven Exams:** ACOG recommends pelvic exams for symptoms like abnormal bleeding, pelvic pain, or sexual dysfunction, and for procedures like endometrial biopsies or IUD placements³⁰
- **Risk-Based Protocol Benefits:** Tailored protocols in dermatology and other fields improve outcomes, satisfaction, and reduce unnecessary interventions. Case studies on OCPs show that selective exams based on risk improve adherence and patient experience.
- **Comprehensive Medical Histories:** Updating medical, surgical, and family histories ensures exams are targeted to individual risks, improving safety and minimizing unnecessary procedures.

Limitations and Future Directions

Refine Criteria for Pelvic Exam Necessity

- A study found dermatologists performed pelvic exams in only 36.1% of cases³¹
- Many women prefer skipping pelvic exams when starting OCPs, with no increased risk of cervical cancer^{32,33}
- Evaluate the long-term impact of eliminating routine pelvic exams on OCP efficacy in acne management and potential health consequences.
- Pap smears may be more effective than routine pelvic exams³⁴

Interdisciplinary Multi-Center Trials

- Prioritize large, multi-center trials to gather significant data on outcomes.
- Foster collaborative studies between dermatology and gynecology to explore biomarkers or predictive factors for pelvic exams.
- Investigate telemedicine and non-invasive diagnostics to replace pelvic exams and improve patient comfort.
- Develop patient-centered care models balancing dermatological and gynecological needs.

Conclusions

The growing understanding of OCP use in acne management calls for a reassessment of routine pelvic exams. Current evidence shows that these exams, historically used for gynecological risk mitigation, do not improve acne treatment outcomes and often lead to unnecessary discomfort, anxiety, and false positives. By following updated guidelines, healthcare providers can shift to a more patient-centered approach, using pelvic exams selectively based on individual risk factors. This change could improve patient care, reduce unnecessary interventions, and maintain OCPs as a valuable acne treatment. Future research should focus on refining guidelines for more personalized care.

References

