



Oh Baby: Combined oral contraceptives during breastfeeding

CLINICAL QUESTION

Do combined oral contraceptives (COCs) affect breastfeeding or infant outcomes?

BOTTOM LINE

Trials are older (>35 years), small (<300 mom/infants) and highly unreliable. If results are real, COCs may lower infant growth (by~240g) and rates of exclusive breastfeeding (81% versus 92%) compared to placebo at 90 days. Progestin-only pill (POP) evidence is inconsistent/unreliable. If results are real, infant growth is not different compared to placebo. If early postpartum contraception is desired, guidelines recommend progestin-only methods due to increased venous thromboembolism risk.

EVIDENCE

- Randomized controlled trials (RCTs) from two systematic reviews.^{1,2} Oral contraceptives started 2-6 weeks postpartum. Results statistically different unless indicated.
- COC versus placebo:
 - Infant weight:
 - 182 women, ethinyl estradiol 30mcg/levonorgestrel 0.15mg:³

- At 91 days postpartum: 6011g versus 6250g (placebo).
 - 50 women, mestranol 80mcg with progestin:⁴
 - Between weeks 2-5 postpartum: Weight gain ~7oz less versus placebo, statistics not reported.
 - Exclusive breastfeeding:
 - At 91 days:³ 81% versus 92% (placebo).
 - Supplemental formula:
 - At 91 days:³ Proportion supplementing: 18% versus 8% (placebo), not statistically different.
 - At 5 weeks:⁴ ~710 versus 190 supplemental calories/week (placebo), statistics not reported.
- POP versus placebo:
 - Started ≤6 weeks postpartum: Two low-quality RCTs (20 and 400 women).^{5,6}
 - Infant growth: No difference.²
 - COC versus POP:
 - Largest RCT (171 women) comparing ethinyl estradiol 30mcg/levonorgestrel 150mcg versus levonorgestrel 150mcg over 6-24 weeks postpartum:⁷
 - No difference: Infant weight or supplementation.
 - Milk volume: Decreased 42% COC vs 12%.
 - Results consistent with other RCT (127 women);⁸
 - No difference: Breastfeeding or adverse effects at 6 months.
 - Limitations: Old trials (>35 years);^{3-5,7} incomplete reporting;^{3,4,7} underpowered;⁸ high drop-outs;^{7,8} unclear randomization;³ some formulations/doses no longer used.^{4,9}
 - COC adverse effects on mother/child pairs from non-RCTs:
 - 48 pair: No difference in growth/intellectual development versus control, ≤8 years.⁹
 - 103 versus 227 pairs (placebo/intrauterine device): No difference in infant breast/genital changes at 1 year.¹⁰

CONTEXT

- Guidelines recommend:
 - Progestin-only contraception during early postpartum period.^{11,12}
 - Against COC within first 4-6 weeks postpartum while breastfeeding due to venous thromboembolism risk.^{12,13}
 - Early postpartum risk is 15-35 times non-pregnant,^{12,14} returning to baseline at 6-12 weeks.¹⁴

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AUTHORS

Jennifer Potter, MD CCFP,
Samantha Moe, PharmD,
Allison Paige, MD CCFP

Authors do not have any conflicts of interest to declare.

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