Verifying the value of vaginal estradiol tablets

Clinical Question: Are vaginal estradiol tablets (Vagifem®) effective for genitourinary syndrome of menopause?

Bottom Line: Vaginal estradiol tablets are likely no better than placebo vaginal gel for reducing “most bothersome symptom scores” (mainly dyspareunia). However, compared to placebo vaginal tablets, they reduce symptoms (example: treatment “success” at 12 months in 86% versus 41% placebo). A non-medicated vaginal gel may be reasonable first-line for dyspareunia.

Evidence:

- Six double-blind, placebo-controlled, randomized, controlled trials (RCTs). Most used 4-point outcome scale (range 0-3, lower better).\(^1\)\(^-\)\(^4\) Statistically significant unless indicated.
- Versus placebo gel:
  - 1 RCT (302 women). Most bothersome symptom score (pain with vaginal penetration in 60%). Final score at 12 weeks (baseline 2.5):
    - 1.1 versus 1.2 (placebo), not statistically different.\(^1\)
    - "Meaningful benefit": 80% versus 65% (placebo).
    - No difference: 11 other outcomes.
- Versus placebo vaginal tablet:
  - Vaginal symptoms:
    - Most bothersome symptom score (dyspareunia in 57%). Final score at 12 weeks (baseline ~2.3):
      - 1 RCT (309 women): 1.1 versus 1.4 (placebo).\(^2\)
    - Composite vaginal symptom score (baseline ~2), final score:
      - At 12 months (1612 women): 0.21 versus 1.15 (placebo).\(^3\)
      - At 12 weeks (230 women):
        - 25mcg dose 0.56 versus 1.1 (placebo).
        - 10mcg dose not different from placebo.
    - Percent without moderate-severe individual symptoms at 12 weeks (1 RCT, 164 women):\(^5\)
      - Dryness: 85% versus 72% (placebo).
      - Itching/burning: 89% versus 74% (placebo), not statistically different.
Dyspareunia: 92% versus 76% (placebo).
- Overall "success" at 12 months (1612 women): 86% versus 41% (placebo), number needed to treat=3.
- Urinary incontinence:
  - Percent without urinary symptoms:
    - At 12 months (1612 women): 84% versus 64% (placebo).3
  - "Change for the better":
    - At 12 weeks (164 women): 63% versus 32% placebo.5
  - No difference frequency/nocturia at 12 weeks (110 women).6
- Cancer/endometrial thickening (unopposed estrogen), 2 industry-funded studies:7,8
  - From 386 women with negative baseline investigations, 1 hyperplasia and 1 carcinoma.
    - Similar to background rate.
- Systematic reviews combined different dosage forms and did not include all RCTs.9-12

Context:
- Some studies used 25mcg dose, not available in Canada.3-6
- Vaginal moisturizer no better than placebo gel.1
- More women satisfied with tablets than vaginal estrogen cream (85% versus 73%).13

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Disclosures:
Authors do not have any conflicts of interest to declare.

References:

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