36th ENTIS Conference 11th – 14th Sept 2025
ARISTOTLE UNIVERSITY'S RESEARCH DISSEMINATION CENTER (KEDEA)
THESSALONIKI, GREECE
E-Poster 36

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High Dose Estrogen During Breastfeeding – A Prospective Study

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Introduction

The accepted contraceptive hormonal therapy prescribed for breastfeeding women is progesterone-based. However, in certain cases, the inclusion of estrogen in the treatment is unavoidable. Endogenous estradiol transfer to breast milk is minimal and remains within physiological levels after ovulation resumes.

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Methods

- Prospective study
- Follow up: 2022-2024
- TIS: Zerifin
- Referral: High dose estrogen use during breastfeeding
- Methods: Telephone interviews follow up
- Assessed: milk production changes and child gross motor development

Estradiol Valerate (EV)

- An esterified prodrug
- Typically requires higher doses

Estradiol Hemihydrate (EH)

- A directly active form of estradiol
- Effective at lower doses

Estrogen During Lactation

Number of Women Enrolled	21
Women using EV with Norgetrel	16
Women using EH	5
Median Daily Dose (mg)	2 (IQR 1–4)
Mean (SD) Maternal Age at Consultation (years)	32,9 ± 5,3
Median Treatment Duration (days)	21 (IQR 5–42)
Median Age of Child at Treatment Start (months)	2
Women Using Concomitant Medications (%)	43
Concomitant Medications that are Hormone Therapies (%)	67
Median Age of Child at Follow-up (months)	13 (IQR: 3.5–38)

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Results

Maternal outcome

- Eight women (8/21) experienced a reduction in milk production, three of them required supplementation.
- For three women (3/8), milk production has not returned to normal.

Infant outcome

- No adverse effects were observed in the infants.
- There were no signs of somnolence or appetite reduction.
- The infants demonstrated age-appropriate weight gain and gross motor skills appropriate for age, as assessed by the Denver Developmental Scale.

	Outcome
Milk Production Decreased (%)	38%
Women Requiring Supplementation (%)	37,5%
Mean Breastfeeding Duration (months)	8.5
Adverse effects	NO
Denver Scale Development	Normal
Age-appropriate weight gain	Normal

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Conclusions

Short-term high-dose estrogen during breastfeeding may temporarily reduce milk production, which usually normalizes after the cessation treatment.

No negative effects on infant development have been observed.

Further research is needed to confirm these findings.