A descriptive study of estradiol levels in transfeminine individuals who received estradiol implants as standard care in Hunter New England (HNE) Health Services

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Background:

Gender-affirming hormone therapy aims to reduce gender dysphoria and align physical appearance more closely with gender identity. Estradiol implants provide one option for feminising therapy, although there is a lack of published data for their use in this setting. This study describes results of surveillance of serum estradiol levels for a series of clients who received estradiol implants for feminising hormone therapy. The aims included to assess the proportion of results within the target range of 250-1000pmol/L to better inform decisions regarding use of implants and provide direction for further research.

Methods:

Electronic medical records were audited retrospectively for a cohort of consecutive clients who received estradiol implants as standard care between 1st June 2019 - 31st January 2022. Data was collected regarding age, BMI, implant dose, any reported adverse events and results of any serum estradiol levels measured following implant insertion.

Results:

Thirty-three individuals had between one and four implants inserted per person, with a total of 67 implants inserted during the time period. Estradiol implant dose ranged from 50mg to 200mg, with most (n=49, 73.1% of implants) being 100mg. A total of 136 results for serum estradiol were available following implant insertion. Results ranged from 137pmol/L to 2009 pmol/L. Most results (n=94, 69.1% results) were to target between 250-1000pmol/L, 35 results (25.7%) were < 250pmol/L and 7 results (5.1%) were > 1000 pmol/L. Few adverse events were reported.

Conclusions:

This small series suggests that implants are a safe and effective option for delivery of feminising hormone therapy. Further collaborative research to learn from experiences throughout Australia is recommended to be able to provide more accurate recommendations regarding optimal implant dose, duration of effect and influence of other factors such as body habitus on serum estradiol levels obtained using implants.

Disclosure of Interest: None

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