

Antenatal Management of Hypothyroidism in a UK Tertiary Hospital

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BACKGROUND:

- Hypothyroidism affects approximately 1-2% of antenatal women.
- Poor control increases the risk of fetal compromise and maternal thyroid stimulating hormone (TSH) levels are monitored. There are no national guidelines for antenatal care of hypothyroidism.
- In our hospital, levothyroxine dose is prophylactically increased before booking and thyroid function test (TFT) checked at booking, 16, 20, 28 and 34/40, with additional TFTs requested 4weeks post-dosage changes.

AIM:

- Establish whether clinical practice was compliant with Trust guidelines
- Investigate the implications of thyroid control in pregnancy and optimal number of TFTs.

METHOD:

- All antenatal patients with hypothyroidism, managed at Birmingham Women's Hospital (Birmingham, UK) between September 2019 - September 2020 were identified.
- All data were collected retrospectively from electronic records. Chi-squared test was used for statistical significance.

RESULTS (n=179):

TFT checks

- 50% had all 5 TFT checks
- Lowest uptake at 16/40 (64%) and 34/40 (55%)
- Omitting routine 16, 28, 34/40 TFTs would have led to 36% reduction in TFT tests

Dose change

- 67% had prophylactic levothyroxine dose increase
- 46% required no dose change antenatally
- 33% of women who needed more than 2 dose changes by 20/40 required further dose changes

Effects on pregnancy outcomes

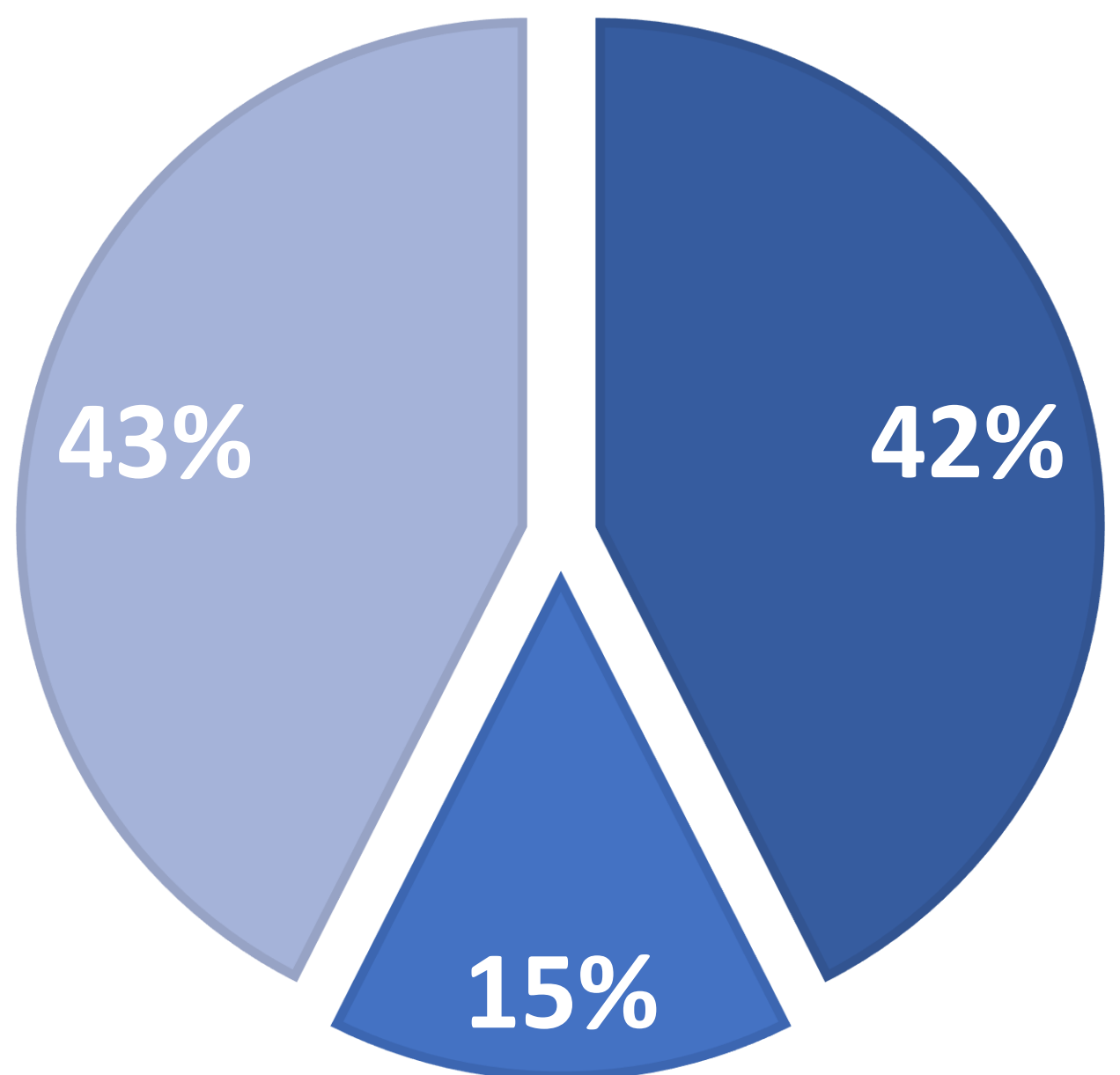
- **NO** adverse outcomes with raised booking TSH (>10uIU/mL, N=6)
- TSH >5uIU/mL in the first trimester showed an increased rate of preterm delivery (p=0.037)

CONCLUSIONS:

- No major adverse outcomes were identified in women with significantly raised booking TSH
- Good control in the first trimester was associated with reduced incidence of preterm delivery
- Well controlled hypothyroidism requires infrequent monitoring
- We propose:
 - Continuing the prophylactic increase of levothyroxine
 - Omission of routine 16/40 and 34/40 TFTs
 - Cessation of routine TFTs after 20 weeks if no dose change was required previously

MODE OF DELIVERY

- CAESAREAN
- INSTRUMENTAL
- SPONTANEOUS VAGINAL



OBSTETRIC COMPLICATIONS

- Yes
- No

