



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

THYROID DISEASE COMPLICATING PREGNANCY

KEY WORDS:

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INTRODUCTION:

- Thyroid function is intimately related to the reproductive performance in women. Pregnancy has a goitrogenic effect on the thyroid gland because of the increased demand of thyroid hormones to maintain the increased maternal hormone levels & meet requirements of the fetus.
- Undiagnosed hypothyroidism is associated with increased risk of miscarriages, preterm births, still births, low birth weight babies, low IQ and poorer cognitive function in the offspring.
- Over all incidence of hypothyroidism is 2-3% and overt hypothyroidism at 0.3 – 0.5% in general population. Normal values of TSH were taken as 0.1-2.5 mIU/l in 1st trimester, 0.2-3mIU/l in 2nd trimester & 0.3-3mIU/l in 3rd trimester.

OBJECTIVES:

- The main objective of this study is to know the prevalence, maternal complications and fetal outcome in women with hypothyroidism during pregnancy, in our tertiary care center.

METHODOLOGY:

- This is a retrospective study, done in Dr.PSIMS&RF, chinnai, over 2yrs duration i.e June 2017 to May 2019.
- Women were evaluated in terms of age, parity, significant previous obstetric history, TSH levels at 1st visit, need for increase in thyroxine dosage during pregnancy, preeclampsia, GDM, birthweight, liquor, prematurity, NICU admissions, congenital hypothyroidism & thyroid function test after 6 weeks of delivery.

RESULTS:

AGE	NUMBER	PERCENTAGE
18-20yrs	11	12%
21-25yrs	43	51%
26-30yrs	22	27%
>30yrs	8	8%

- In our study we have noticed prevalence of hypothyroid to be 3.85% (84 out of 2180) with 2/3rd of women with uncontrolled thyroid levels at the time of conception.
- Overt hypothyroidism was noted in 1.6% (39 of 2180) while rest were diagnosed during pregnancy.

AGE DISTRIBUTION:

GRAVIDA:

GRAVIDA	NUMBER	PERCENTAGE
PRIMI	36	43.5%
G2	27	32%
G3	11	13%
G4	10	11%
G5	-	

TIME OF DIAGNOSIS:

TIME OF DIAGNOSIS	NUMBER	PERCENTAGE
BEFORE PREGNANCY	36	46%

IN 1 ST TRIMESTER	20	24%
IN 2 ND TRIMESTER	17	20%
IN 3 RD TRIMESTER	11	6.4%

CHANGE IN DOSE:

- Of women on levo-thyroxine therapy, need for increase of levothyroxine dosage was noted in -21 (25%) cases.
- Dosage remained unchanged in - 63 (75%) cases.

OUTCOME:

- TERM DELIVERY- 77-(91%)
- PRETERM DELIVERY- 7 (9%)

MODE OF DELIVERY:

- VAGINAL DELIVERY: 51 (61%)
- ABDOMINAL DELIVERY :- 33 (39%)

INDICATIONS FOR LSCS:-

- FETAL DISTRESS – 9
- PREVIOUS LSCS IN LABOUR-8
- ECLAMPSIA – 2
- CPD – 3
- NPOL – 4
- SEVERE OLIGOHYDRAMNIOS -4
- BREECH -2
- G-3 PLACENTA PREVIA-1

BIRTHWEIGHT:

BIRTH WEIGHT	NUMBER	PERCENTAGE
<2.5kg	8	9.6%
2.5- 3.5kg	71	86.4%
>3.5kg	5	4%

LIQUOR:

LIQUOR	NUMBER	PERCENTAGE
CLEAR & ADEQUATE	79	93.6%
MODERATE MECONIUM STAINED	2	1.6%
THICK MECONIUM STAINED	4	4.8%

NICU ADMISSION:

- ADMITTED IN NICU : 16 (19%)
- GIVEN MOTHERSIDE IMMEDIATELY : 68 (81%)

ASSOCIATED CONDITIONS:

ASSOCIATED CONDITION	NO.OF CASES	PERCENTAGE
ECLAMPSIA	2	3%
GDM	3	4.8%

PAST OBSTETRIC HISTORY:

- SPONTANEOUS ABORTIONS -20 (24%)
- MTP-2 (1-spina bifida, 1-hydrops fetalis)
- HYPOTHYROIDISM IN PREV.PREGNANCIES-7(8%)
- PREVIOUS PRETERM BIRTH - 3 (3.2%)
- H/O PCOS -4 (4.8%)

- CONGENITAL HYPOTHYROIDISM WAS NOT DETECTED IN ANY CASE.
- At 6 weeks follow up, thyroxine in women with overt hypothyroidism was titrated to their prepregnant dosage.

CONCLUSION:

- The results of this study indicate an *increased prevalence (3.85%)* of hypothyroidism (TSH>3mIU/L) & they are associated with adverse maternal & perinatal outcome.
- Increased operative intervention(39%).
- Significant no. of neonates placed mother-side immediately after delivery was delayed.(19%)
- Uncontrolled hypothyroidism was noted in even in last trimester, hence routine antenatal investigations should include *TSH in every trimester*.
- Significant no of women conceived with uncontrolled thyroid levels.

hence *pre-conceptional counselling should include thyroid profile*.