



## THYROID DYSFUNCTION IN PATIENTS WITH MENSTRUAL DISORDERS A STUDY IN EASTERN ODISHA

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### ABSTRACT

Thyroid disorders are the common worldwide problem. this study was done to evaluate the thyroid function in patients presenting with varying menstrual disorder in reproductive age group from 15 to 45 year of age.

**Method:** This study was carried out in obstetrics and gynaecology department of Pradyumna Bal Memorial Hospital, KIMS Bhubaneswar Orissa on 200 women who were clinically given the provisional diagnosis of menstrual disorder .Thyroid function test were done in all patients.

**Results:** Among 200 women 104(52%) women were euthyroid, 80 women were hypothyroid out of which 44 were subclinical hypothyroidism(22%),overt hypothyroidism 36(18%). Hyperthyroidism was seen in 16 (8%) patients out of which subclinical in 4(2%) patients, overt in 12(6%) patients.

**Conclusion :** This study finds Thyroid dysfunction especially subclinical hypothyroidism to be common among women with menstrual disorder.

**KEYWORDS :** Menstrual disorders, Thyroid dysfunction, subclinical hypothyroidism.

### Introduction

Menstrual disorders pose a huge burden on present day society, affecting one in every five women during their life span. Thyroid hormones play an important role in normal reproductive physiology through direct and indirect effect. Thyroid disorders are the commonest endocrine disorder worldwide with females having higher dysfunction rates than males. Thyroid disorders increases with age and it is estimated that 26% of premenopausal and menopausal women are diagnosed with thyroid disease.

Subclinical hypothyroidism has been associated with occult menorrhagia. Hyperthyroidism occurring before puberty has been reported to delay the menarche.

Timely detection of thyroid disorders in patients presenting with menstrual disorders and their management can prevent surgical interventions like curettage and hysterectomies.

### Methods

The study was conducted in KIMS in the period from Feb 2016 to Feb 2017. 200 women with menstrual disorders like menorrhagia, metrorrhagia, polymenorrhoea, oligomenorrhoea and amenorrhoea were studied for thyroid profile in the reproductive age of 15 to 45 years. Patients with organic pathology like uterine fibroid, adenomyosis, tubercular endometritis, polyp, uterine malignancy and patients with IUCD were excluded from the study.

Study protocol included thorough history taking, general physical examination, pelvic examination, routine investigations like Hb, BT, CT, TLC, DC, Platelet count and ABO -Rh typing, serum T3, T4, TSH estimation.

### Results

In our study group out of all types of menstrual irregularities 48% presented with menorrhagia, 20% oligomenorrhoea, 17% polymenorrhoea, 14% metrorrhagia, 1% amenorrhoea. Out of 200 patients with menstrual disorder 52% were euthyroid, hypothyroid 40% out of which subclinical hypothyroid disorder in 22%, overt hypothyroidism in 18%, hyperthyroid disorder in 8% subclinical in 2%, overt in 6%.

**Table-1**

Presenting Complain	Number	Percentage %
Amenorrhoea	02	1 %
Hypo/Oligomenorrhoea	42	20 %
Metrorrhagia	28	14 %
Menorrhagia	96	48 %
Polymenorrhoea	34	17 %
Total	200	

**Table-2**

Thyroid	Number	Percentage %
Euthyroid	104	52 %
Sub clinical hypothyroid	44	22 %
Overt hypothyroid	36	18 %
Hypothyroid	16	08 %
Total	200	

### Discussion

In the present study most of the patients presented with menorrhagia. Similar were the observation of Pahwa(50%) and Padmaleela (50%). In the study by Sharma prevalence of hypothyroidism was detected in 22% of patients presenting with menstrual disorders. Menon and Bharucha gave incidence of 46.15% menorrhagia/polymenorrhoea 23.07% oligomenorrhoea in hypothyroid patients. In our study had oligomenorrhoea in 20% patients. Though Singh et al have reported a high incidence of oligomenorrhoea in the hypothyroid patients having infertility yet menorrhagia incidence is same as in present study. Means observed menorrhagia in 32% of premenopausal women with myxoedema. Benson and Dailey found 58% oligomenorrhoea/ amenorrhoea and only 5% menorrhagia in hyperthyroid patients. Singh et al reported oligomenorrhoea/amenorrhoea only in 9% of cases

### Conclusion

The present study finds high rate of thyroid dysfunction especially subclinical hypothyroidism among women with menstrual disorders.

In the patients with menstrual dysfunction if thyroid disorders are timely diagnosed and treated, the menstrual irregularities settle

and unnecessary treatment like surgery and hormone treatment can be avoided. Estimation of thyroid status should be part of investigation being done in the patients of menstrual disorders. Findings may need to be verified in larger population. prospective studies needs to be done whether anti-TPO antibody should be recommended.

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