



THYROID FUNCTION TESTS AND ABNORMAL UTERINE BLEEDING

Dr Nihal Singh Meena	Junior Specialist, Obstetrics And Gynaecology , District Hospital Sirohi
Dr Virendra Mahatma*	Principal Specialist, General Medicine, District Hospital Sirohi. *Corresponding Author
Dr Ashvini Kumar Maurya	Deputy Director,principal Medical Officer, District Hospital Sirohi
Dr Vaibhav Kate	Gynaecologist, Gujarat Hospital Sirohi

ABSTRACT

BACKGROUND: To estimate the prevalence of thyroid disorders in women with Abnormal uterine bleeding and to assess menstrual patterns in women with thyroid disorders.

MATERIAL & METHODS: Hospital based prospective study conduct on females presenting with abnormal uterine bleeding. Patients who will be pregnant, had an IUCD, will be known to have cervical or uterine malignancy, fibromyoma, polyp, etc, any coagulation disorders, liver/renal diseases or were on medications like steroids, neuroleptics, anticoagulants and cytotoxic drugs were excluded from study

RESULTS: Among 100 women, 34 had hypothyroidism, 9.00 patient had hyperthyroidism rest 57 were euthyroid. Out of 34 hypothyroid patients, 20 had menorrhagia, 3 had oligomenorrhoea and out of 9 patient with hyperthyroidism Patients, 6 had oligomenorrhoea, 3 had Hypomenorrhoea.

CONCLUSION: The study concludes that biochemical evaluation of thyroid function should be made mandatory in all cases of AUB.

KEYWORDS : Abnormal uterine bleeding (AUB), Endometrial hyperplasia, Menorrhagia, Thyroid dysfunction

INTRODUCTION

Thyroid gland is one of the most vital endocrine organs which plays a major role in growth, development, metabolism and function of every organ in the body. Both Hypo and Hyperthyroidism can result in menstrual irregularities. In women thyroid disorders can cause a broad spectrum of reproductive abnormalities ranging from abnormal sexual development, menstrual irregularities, infertility and premature menopause. Thyroid disorders are 10 times more common in females and this high prevalence is possibly due to autoimmune nature of thyroid disorders. Thyroid disorders are the most common endocrine disorders in India. Incidence increases with age and its prevalence is 26% in women (5). Hypothyroidism even in subclinical form can cause menorrhagia.^{1,2}

Timely detection of thyroid dysfunction in women presenting with A.U.B. and its proper management can prevent unnecessary surgical interventions and helps to reduce financial burden and improves quality of life. Hence this study is undertaken to evaluate the thyroid dysfunction in women with Abnormal uterine bleeding.

MATERIALS AND METHODS

Hospital based prospective study conduct on females presenting with abnormal uterine bleeding. Females presenting with abnormal uterine bleeding, with thyroid dysfunction were included in our study.

Patients who will be pregnant, had an IUCD, will be known to have cervical or uterine malignancy, fibromyoma, polyp, etc, any coagulation disorders, liver/renal diseases or were on medications like steroids, neuroleptics, anticoagulants and cytotoxic drugs were excluded from study.

After taking a detail history, including the menstrual and obstetric history, vitals will be taken and systemic examination will be done. Per abdomen examination, local examination, per speculum and per vaginum examination will be done. Ultrasonography will be done for all patients. Baseline investigations like Hb, platelet count, TLC, DLC, RBS,

S. Creat, BT, CT and PT will be done. S. TSH, FT3 and FT4 will be done.

To collect required information from eligible patients a pre-structured pre-tested Proforma will be used. For data analysis Microsoft excel and statistical software SPSS will be used and data will be analyzed with the help of frequencies, figures, proportions, measures of central tendency, appropriate statistical test.

RESULTS

Table 1: Thyroid status

Thyroid Status	No. of cases	Percentage
Euthyroid	57	57.00
Hypothyroid	34	34.00
Hyperthyroid	9	9.00
Total	100	100

Among 100 women, 34 had hypothyroidism, 9.00 patient had hyperthyroidism rest 57 were euthyroid.

Table 2: Pattern of Bleeding

Pattern of Bleeding	Hypothyroid (n=34)	Hyperthyroid (n=9)
Menorrhagia	20	0
Polymenorrhoea	6	0
Acyclic	3	0
Oligomenorrhoea	3	6
Hypomenorrhoea	0	3
Metrorrhagia	2	0

Out of 34 hypothyroid patients, 20 had menorrhagia, 3 had oligomenorrhoea and out of 9 patient with hyperthyroidism Patients, 6 had oligomenorrhoea, 3 had Hypomenorrhoea.

DISCUSSION

Among 100 women, 34 had hypothyroidism, 9 patient had hyperthyroidism rest 57 were euthyroid. Which was similar to study done by Joschi et al.³ and N Bhavani et al⁴. One of the explanations is activity of thyroid is closely linked with the process of ovarian maturation. The thyroid gland is itself

dependent on direct and indirect stimulation from the ovary to discharge its own function.

Out of 34 hypothyroid patients, 20 had menorrhagia, 3 had oligomenorrhea and out of 8 patient with hyperthyroidism Patients ,6 had oligomenorrhea ,2 had Hypomenorrhoea .which was similar to study done by Scott and Mussey⁵ and Kaur T et al⁶.

Thyroid disorders are more common in women with menstrual irregularities ranging from menorrhagia to oligomenorrhea as compared to general population. Woman with hypothyroidism, commonly presents with anovulation and unopposed oestrogen activity causes endometrial hyperplasia which may outgrow the blood supply and may cause local areas of necrosis that breaks down and produces bleeding. In hypothyroid patients the menstrual abnormality is much more severe and anovulatory cycles are common.

CONCLUSION

Prevalence of Hypothyroidism is more in women with Menorrhagia being the most common symptom in women with Abnormal uterine bleeding. Every woman with menstrual irregularities should undergo thyroid assessment at initial visit. Correction of the thyroid disorder in patients with dysfunction of thyroid may obviate the need for unnecessary interventions like hormonal treatment for arrest of bleeding and hysterectomy

REFERENCES

1. Cecconi S., Rucci N., Scaldaferrri M.L., Masciulli M.P, Rossi G., Moretti C., D'Armiento M. & Ulisse S. Thyroid hormone effects on mouse oocyte maturation and granulosa cell aromatase activity. *Endocrinology*. 1999;140:1783-8.
2. Maruo T, Matsuo H. & Mochizuki M. Thyroid hormone as a biological amplifier of differentiated trophoblast function in early pregnancy. *Acta Endocrinologica*. 1991;125:58-66.
3. Joshi JV, Bhandarkar SD, Chadha M, Balaiah D, Shah R. Menstrual irregularities and lactation failure may precede thyroid dysfunction on goiter. *J Postgrad Med* 1993; 39(3): 137-41.
4. N Bhavani et al. A study of correlation between abnormal uterine bleeding and thyroid dysfunction. *International Journal of Recent Trends in Science and Technology* 2015; 14(1): 131-135
5. Scot JC and Mussey E. Menstrual patterns in myxedema. *Am J Obstet Gynaecol* 1964; 90: 161-65.
6. Tajinder Kaur, Veena Aseeja. Thyroid Dysfunction in Dysfunctional Uterine Bleeding. *Webmed Central Obstetrics and Gynaecology* 2011; 2(9): 1-7.