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SUBCLINICAL HYPOTHYROIDISM AS A RISK FACTOR FOR MENSTRUAL DISORDERS

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Annotation: Subclinical hypothyroidism is more common in females, usually presenting as vague manifestations. The common presenting complaints being fatigue, body aches, weight gain, constipation, menstrual irregularities, and infertility. Females with menstrual disorders must be screened at an earlier stage so as to prevent its later consequences. Thus, a study has been conducted to analyze the prevalence of subclinical hypothyroidism among females with menstrual disorders.

Keywords: Subclinical hypothyroidism, thyroid disorder and Menstrual Disorder.

Thyroid disorders are amongst the most common endocrine diseases in India. The thyroid gland disorders are among the most abundant disorders worldwide second only to diabetes.[1] The symptoms are due to either excess hormonal activity or under production of the hormone. The serum TSH is the best initial test of thyroid function. Based on blood samples taken for TSH four groups can be found: Euthyroid, Subclinical Hypothyroidism, Hypothyroidism and Hyperthyroidism. Subclinical hypothyroidism has received attention in recent years due to increase in its prevalence. Subclinical hypothyroidism is defined as high serum Thyroid stimulating hormone (S.TSH) concentration with normal serum free thyroxine (FT4) and free triiodothyronine (FT3) concentrations, associated with few or no signs and symptoms of hypothyroidism.[2] Any S.TSH value above 4.6 mIU/ml should be considered abnormalin reference to the diagnosis of subclinical hypothyroidism.[2] The common problems found in subclinical hypothyroidism are weight loss, palpitation, alteration of bowel problems, weakness, lethargy, skin changes, sleep problems and menstrual irregularities etc. The subclinical hypothyroidism is associated with a number of complications. Various studies have shown that subclinical hypothyroidism is associated with hyperlipidemia, neuromuscular, neuropsychiatric symptoms, myocardial dysfunction and decrease in quality of life with progression to overt hypothyroidism, [2] risk of cardiovascular disease. [3] The thyroid disorders are more common in women than men[4] These disorders often manifests itself during the reproductive period of a women's life and is the second most common endocrinopathy that affects women of child bearing age.[5] The undiagnosed and untreated thyroid disease can be a cause of infertility as well as sub-fertility. However, because of the lack of clinical symptoms, the subclinical hypothyroidism remains undetectable. Many patients with SCH do not need treatment, but if a decision is made to treat, then oral L-thyroxine is the treatment of choice. Deeba et al (2014) concluded that thyroid dysfunction is an important factor for infertility.[6] Acharya et al (2011) conducted a study on eighty patients of reproductive age, out of whom 46 (57.5%) had subclinical hypothyroidism and 34 (42.5%) had overt hypothyroidism. In subclinical hypothyroidism group the menstrual dysfunction which dominated was oligomenorrhea (28.2%) followed by menorrhagia (17.39%) and 39.13% had normal menstruation. They also concluded that subclinical hypothyroidism is one of the

major etiological factors of infertility and it should be kept in mind while treating patients with infertility.[7] The thyroid dysfunction can lead to menstrual irregularities. Thus, females affected with subclinical hypothyroidism and having menstrual abnormalities must be screened and treated at an earlier stage to reduce the burden of infertility. Menstruation is an important part of female reproductive cycle. It is typically a universal event during a woman's reproductive life. Its onset known as menarche may be characterized by a number of irregularities. However, if persistent, menstrual disorder/irregularity becomes a major gynaecological problem in adolescence and adult life. It has an adverse impact on daily activities such as avoidance of exercise or outdoor activities and increase in number of days absent from workplace etc, henceforth affecting the quality of life. The spectrum of menstrual disorder/irregularity ranges from disorder of cycle length to disorder of flow. These include: absence of menstruation (amenorrhea), excessive or prolonged flow (menorrhagia), light, infrequent or delayed flow (oligomenorrhea), painful menstruation (dysmenorrhea) and Premenstrual Syndrome (PMS)[8] Chandey et al (2016) concluded that subclinical hypothyroidism is more common especially in females, usually presenting as vague manifestations. The common presenting complaints being fatigue, body aches, weight gain, constipation, menstrual irregularities, and infertility.[9] So in their study they recommended that any subject presenting with undiagnosed fatigue, weight gain and menstrual irregularities should be subjected to TSH screening. Thus, there is a need to explore this aspect in the earlier stages so as to prevent its later complications. Aim of the study The aim of the present study is to find the prevalence of subclinical hypothyroidism among the females with menstrual disorders.

Objectives of the study

1. To find out the various menstrual disorders among females using Women Health Questionnaire.

2. To find out the prevalence of subclinical hypothyroidism among females with menstrual disorders.

Research Design: The study is descriptive in nature and is designed to find the prevalence of subclinical hypothyroidism among females with menstrual disorder. Sample size: The study was conducted on 281 female subjects Population: The females with menstrual disorder constituted the population of the study Research Setting: Fortis Escorts Hospital and Sadbhawna Physiotherapy Centre, Amritsar Sampling Criteria Inclusion Criteria 1. Females with menstrual disorder 2. Residents of Amritsar City 3. Subjects willing to participate 4. Age group 18-35 years Exclusion Criteria 1. Subjects already diagnosed with any case of gynecological disorders 2. Any Physical impairment 3. Pregnant and Menopausal women Tool used for the collection of data Women Health Questionnaire.

The present study concluded that dysmenorrhea is the most common prevalent menstrual disorder and Pre menstrual disorder being the second commonest menstrual disorder. The study also revealed that subclinical hypothyroidism is the most prevalent thyroid disorder among females with menstrual disorder. Moreover, the prevalence of subclinical hypothyroidism was found to be most prevalent among the females suffering from dysmenorrheal and Pre menstrual disorder. The study can be done on a large sample and measures should be investigated to manage subclinical hypothyroidism in an attempt to reduce its later consequences.

REFERENCES

1. ShrutiM, Amruthlal W, Reddy GC, Kanagasabapathy AS and Pragna R. Diagnostic strategies for subclinical

hypothyroidism. Indian Journal of clinical Biochemistry 2008; 23(3):279-282.

2. Deshmukh Vaishali, Behl Anish, Iyer Vagesh, Joshi Harish, Dholye Jayashree P, Varthakavi Prema K. Prevalence, clinical and biochemical profile of subclinical hypothyroidism in normal population in Mumbai. Indian Journal of Endocrinology and etabolism. 2013; (17) 3.

3. Bastenie PA. Hypothyroidism and Coronary heart disease. Acta Cardiol 1982; (7):365- 373.

4. Hollowell JG.,Staehling NW, Flanders WD, Hannon WH, Gunter EW, Spencer CA and Braverman LE. Serum TSH, T4, and Thyroid antibodies in United State population (1988 to 1994): National Health and Nutrition Examination Survay (NHANES III).The journal of Clinical Endocrinology and Metabolism 2002; 87(2):489-499.

5. Neale D, Burrow G. Thyroid disease in pregnancy. Obstet Gynecol Clin N Am 2004; 31: 893 – 905

6. Deeba F, Sultana P, Chowdhury S, Fatima P, Banu J, Begum N. Thyroid status of infertile women attending at Infertility Outdoor in BSMMU. Journal of Bangladesh College of Physicians and Surgeons 2014; (32) 4.