Study of thyroid dysfunction in patients with dysfunctional Uterine Bleeding.

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Summary

Total 213 patients with dysfunctional uterine bleeding were selected for the study after excluding organic genital tract lesions, infection, SLE, liver disorders and coagulopathies. They were studied for thyroid dysfunction by T., T., TSH estimations. Prevalence of hypothyoidism in the present study was 28.17%. Menorhagia is the chief menstrual abnormality while proliferative endometrium was seen in majority of hypothyroid patients. 78% of patients responded to medical line of treatment thereby avoiding hormones or surgical intervention.

Introduction: The diagnosis of dystunctional Uterine bleeding accounts for 10% of gynaecology related complaints. D.U.B. being the major contributor to anaemia, non-surgical management of the problem should be the mainstay of treatment.

Thyroid dysfunction is marked by large number of menstrual abberations. The incidence of subjective menorrhagia in myxoedema varies from 32 to 80% (Scot & Mussey 1964).

Although the occurence of menstrual disturbances in hypothyroid women has been documented the incidence of hypothyroidism requiring treatment for menorrhagia with relief towards this symptom needs to be studied.

Material and Methods:

A cross sectional study was carried out over a period of one year from 1st April 1997 to 31st March 1998 in the Department of Obst. and Gynaecology, Govt. Medical College, Nagpur.

Total 213 patients with D.U.B. attending the Gyn.O.P.D. were included in the study. All cases of DUB from puberty to premenopausal age were selected for the study. Patients with organic lesions of the genital tract, drug (hormone) intake, bleeding disorders, I.U.D. users were excluded from the study. So also patients with oligomenorrhoea and hypomenorrhoea were excluded.

All patients were interrogated for complaints related to thyroid dysfunction. Patients detailed general examination, exam for thyroid stigmata, abdominal and pelvic examination were performed. General and specific investigations which were necessary to exclude other causes responsible for menstrual abnormality were performed. In all patients T₂, T₄, TSH estimations were done by ELISA.

Patients who were found to be hypothyroid are put on thyroid supplementation and response to the treatment was noted down over a period of 6 months.

Table I
Age pattern in DUB with hypothyroidism

| Sr. No. | Age in yrs. | No. of patients | % |
|------------|--------------|-----------------|-------|
| 1. | Less than 20 | 07 | 11.67 |
| 2. | 21-30 | 10 | 16.67 |
| 3. | 31-40 | 29 | 48.33 |
| 4. | More than 40 | 14 | 23.33 |

Table II Parity in hypothyroid patients with D.U.B.

| Sr. No. | No. of children | Patients | % |
|------------|-----------------|----------|-------|
| 1. | Unmarried | 9 | 15 |
| 2. | 0 | 4 | 6.67 |
| 3. | 1 | 20 | 33.33 |
| 4. | 2 | 9 | 15 |
| 5. | 3 | 12 | 20 |
| 6. | 4 and more | 6 | 10 |

Table No. III Nature of symptoms in hypothyroidism

| Sr. No. | Nature of symptoms | No. of patients |
|------------|--------------------|-----------------|
| 1. | Easy fatiguability | 26 |
| 2. | Cold Intolerance | 22 |
| 3. | Constipation | 25 |
| 4. | Voice changes | 24 |

Table No. IV Signs of thyroid hypofunction

| Sr. No. | Sign | No. of patients. |
|------------|--------------------|------------------|
| 1. | Obesity | 31 |
| 2. | Skin changes | 22 |
| 3. | E.C.G. changes | 21 |
| 4. | Tongue changes | 19 |
| 5. | Periorbital oedema | 10 |
| 6. | Slurred speech | 09 |
| 7. | Delayed reflexes | 08 |
| 8. | Thyroid swelling | 18 |

Table No. V Menstrual pattern among hypothyroid patients

| Sr. No. | Туре | No. of patients. | % (Out of 60) |
|------------|-----------------|------------------|---------------|
| 1. | Menorrhagia | 38 | 63.33 |
| 2. | Polymenorrhagia | 14 | 23.33 |
| 3. | Metropathia | 04 | 6.66 |
| 4. | Metrorrhagia | 04 | 6.66 |

Table No. VI Endometrial pattern in Hypothyroid patients

| Sr. No. | H.P. Report. | Cases | % |
|------------|----------------------|-------|-------|
| 1. | Proliferative phase. | 24 | 40 |
| 2. | Secretory. | 13 | 21.67 |
| 3. | Hormonal Imbalance | 14 | 23.33 |
| 4. | Not available. | | |
| | (unmarried). | 09 | 15 |

Table No. VII Subjective response to the treatment.

| Sr. No. | Response | No. of cases | %age |
|------------|-------------|--------------|------|
| 1. | Positive | 39 · | 78 |
| 2. | No response | 11 | 22 |

Results and Discussion:

Among 213 patients of D.U.B. selected for the study, 60 patients showed altered T3, T4, TSH levels (i.e. Low T3, T4 & raised TSH) pointing to the hypothyroidism. Not a single woman showed biochemmical values suggestive of hyperthyroidism. Prevalence of hypothyroidism in the present study was 28.17% while Mukherjee and Ghosh et. al. (1985) showed 44.44% incidence of hypothyroidism in cases with menstrual irregularity.

It was also noticed that majority of patients of hypothyroidism (48.33%) were between 31 to 40 yrs. of age while 23.33% patients were more than 40 years. Nulliparity or low parity was a common finding in our study showing that fertility is low in hypothyroidism. 40% of hypothyroid patients had one or no issue while 15% were unmarried.

It was also noted that 45% patients were clinically euthyoid but demonstrated altered biochemical levels while 55% patients presented with either symptoms or signs or both. Easy fatiguability was the commonest symptom (26 patients) followed by cold intolerance, constipation and voice changes. More than half patients (31 out of 60) were obese while thyroid swelling was seen in 18 patients.

Type of menstrual abnormality commonly seen in hypothyroidism was menorrhagia (63.33%) followed by Polymenorrhogia. Singh et.al. (1990) reported an incidence of menorrhagia in 44.44% while Willansky and Bernard (1989) stated that all patients of hypothyroidism were menorrhagic.

Endometrial pattern was proliferative in 40%

patients in the present study tollowed by 23.33% patients with hormonal imbalance showing that menstrual cycle is changed to an ovulatory type which may be responsible tor intertility.

Positive response to the treatment in the form of 50% reduction in the blood loss was observed in 78% patients at the end of 6 months of treatment while 22% did not show any response. Ten patients did not report after thyroid supplementation and hence lost for follow up. Out of 39 patients who showed a response,18 patients responded within 3 months of treatment while 21 more patients responded in next 3 months. Prolonged treatment for hypothyroidism may increase the numbers of responding patients. Lahiri et al (1996) reported that 26.5% patients did not show response to the treatment.

Hence thyroid dystunction should be considered as an important etiological factor for menstrual abnormality. Thus biochemical evaluation by T3, T4 & TSH estimations should be made mandatory in D.U.B. cases to detect apparent and occult hypothyroidism. These patients with medical treatment avoids necessity of hormonal treatment or surgical intervention which has their own attendant morbidity.

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