PECULIAR PRESENTATIONS OF ADULT HYPOTHYROIDISM

M A TAHER

ABSTRACT

Recently we found six cases of adult-onset hypothyroidism,[1-2] one of them is subclinical (normal T_4, high TSH), two are familial and one had carpal tunnel syndrome (tingling in the fingers from compression of median nerve in the carpal tunnel).

INTRODUCTION

Hypothyroidism is a relatively common endocrine disorder seen under ordinary circumstances with characteristic clinical signs and symptoms, including cool dry skin, puffy face, non-pitting edema, cold intolerance, constipation, hoarse voice, slow return of reflexes, bradycardia, weight gain, anorexia, increased somnolence and loss of memory.[1] Diagnosis is confirmed by the determination of the serum levels of thyroxine (T4) and thyrotropin or thyroid-stimulating hormone (TSH). The general nature of the effects of thyroid hormone result in abnormalities in many organ systems producing a complex and diverse array of signs and symptoms in addition to those noted earlier. Primary hypothyroidism is associated with hematologic (anemia and coagulopathy), muscular (myopathy), cardiac (cardiomegaly), neurologic (carpal tunnel syndrome), rheumatologic abnormalities (arthralgias,joint effusion, hyperuricemia and associated autoimmune disease), which may dominate the clinical picture and serve as the manifesting sign or symptom of the disorder.[2] Therefore, we like to present a few cases of hypothyroidism with peculiar features.

CASE 1

A female patient aged 48 years was complaining of chest pain and shortness of breath. Chest X-ray and echocardiography revealed pericardial effusion. Serum hormone levels confirmed hypothyroidism (table 1). She was improved by thyroxine 50 micrograms per day.

CASE 2

A male patient of 40 years complained of weight gain. He had no other symptom, but was confirmed to be hypothyroid (Table 1) and was improved by thyroxine.

CASE 3

A male person aged 32 years complained of hoarse voice. He was found to be subclinically hypothyroid. (Table 1, normal T_3 & T_4 but high TSH).

CASE 4 & 6

They are two sisters. There are other hypothyroid patients in their family - paternal aunt and uncle, all of them are doing well on thyroxine therapy.

CASE 5

A hindu lady of 48 years complained of tingling sensation in the fingers (due to compression of median nerve in the carpal tunnel). She was confirmed to be hypothyroid and cured by thyroxine.

Director,Center for Nuclear and Ultasound,Post Box # 16 Rangpur 5400,Bangladesh.

TABLE 1 Hormone levels

Case No.	Sex	Age (Yrs.)	Chief complaints	T3 nmol/L	T4 nmol/L	TSH mIU L	Comment
1	F	48	Pericardial effusion	0.65	17	95	Improved by thyroxine therapy
2	M	40	Weight gain	0.3	61	69.5	Do.
3	M	32	Hoarse voice	1.75	116	5.5	Subclinical hypothyroid
4	F	28	Anorexia	0.15	9	97.5	Familial hypothyroid
5	F	35	Carpal tunnel syndrome	1.05	48	90	Improved by thyroxine therapy
6	F	32	Dull memory	1.85	22	100	Familial hypothyroid

DISCUSSION

A triad of congenital perceptive hearing loss, goitre and abnormal perchlorate test is defined as Pendred's syndrome.[3] It is an autosomal recessive form of sensorineural deafness associated with goitre in that the perchlorate test shows an abnormal organification of non-organic iodine. Three brothers of seven siblings who are affected by Pendred's syndrome are reported.[4] Our cases 4 and 6 are two hypothyroid sisters who have other hypothyroid patients in their family-paternal aunt and uncle are also hypothyroid, all these four persons are adult-onset hypothyroid and doing well on thyroxine therapy. Screening of neonates for congenital hypothyroidism is being done in many countries,[5] but screening of pregnant woman for hypothyroidism is not yet universal.[6] Haddow et al. and Utiger encouraged adequate iodine intake and it should be increased during pregnancy.[7,8]

REFERENCES

1. Klein I, Levey GS : Unusual manifestations of hypothyroidism. Arch Intern Med 1984 ; 144 : 123-128.
2. Cooper DS : Subclinical hypothyroidism. N Engl J Med 2001 ; 345 : 260-265.
3. Pendred V : Deaf-mutism and goiter. Lancet 1896 ; II : 532.
4. Djalilian M, Farhadi M, Nazem F : Pendred's syndrome revisited. Med J IR Iran 1988 ; 2 : 305-311.
5. Taher MA. Follow - ups of congenital hypothyroidism. ASEAN J Radiol 2001 ; VII(ii) : 121-3.
6. Pop VJ, Van Baar AL, Vulsma T. Should all pregnant women be screened for hypothyroidism ? Lancet 1999 ; 354 ; 1224-5.
7. Haddow JE, Plaomaki GE, Allan WC, et al. Maternal thyroid deficiency during pregnancy and subsequent neuropsychological development of the child. N Eng J Med 1999 ; 342 : 549-55.
8. Utiger RD. Maternal hypothyroidism and fetal development. N Eng J Med 1999 ; 341 : 601 - 02.