Indian J Physiol Pharmacol 2001; 45 (1): 125–126

LETTER TO THE EDITOR

ENDOGENOUS DEPRESSION, THYROID FUNCTION AND ACUPUNCTURE

Sir,

(Received on April 6, 2000)

It has been reported that electrical stimulation of certain acupuncture loci was found to be effective in the treatment of stress related physical and mental disorders (1) and that acupuncture is effective in endogenous depression (2). Recently it has been reported that TSH response to TRH may be either exaggerated or blunted in depressed patients (3). Therefore we were interested in finding out the status of thyroid hormones in endogenous depression and the effect of treatment with acupunture.

14 patients (8 males, 6 females) of age groups (17–55 years) attending out patient department of LTM medical college and hospital, Bombay diagnosed as endogenous depression were selected for the study. Patients receiving drug treatment as well as those suffering from other systemic disorders were excluded. After taking detail history and written consent they were followed up weekly for 2 weeks for base line symptoms as per Hemilton's rating scale for primary depressive illness (4). Blood samples were collected for estimation of T3, T4 and TSH followed by acupuncture twice a week through selected points (2). Patients were reassessed after 20 sittings and T3, T4 and TSH were estimated using RIA kit supplied by Bhabha Atomic Research Centre, Bombay. However, only 10 patients (4 male, 6 female) completed 20 sittings and other were excluded. Based on score marks as per criteria of assessment (Table 1) difference between the mean score ± SD before (7.0 ± 3.56) and after acupuncture (3.2 ±1.93) was found to be significant, ($P<0.05$) showing positive effect of acupuncture in endogenous depression. T3, T4 & TSH values, have been shown in the table 2. Results show that T3 was low normal and TSH was high in endogenous depression which were restored to near normal values after 20 sitting of acupuncture, along with improvement of clinical symptoms.

TABLE I: Criteria of Assessment.

Sign/symptoms	*Score marks*
Insomnia	2
Depression	2
Restlessness	3
Body aches	3
Loss of appetite	1
	10 maximum

Effect of acupuncture on endogenous depression was reported by us (2), however, result was not statistically significant probably due to shorter duration of treatment (10 sittings).

Present results show that mental depression causes a tendency towards hypothyroidism (high TSH) which could be restored towards normal by acupuncture resulting in significant improvement of depressive symptoms.

TABLE II: Effect of acupuncture on thyroid function (n = 10).

	T3 (ng/ml)	*T4 (ng/ml)*	*TSH (U/ml)*
Before	0.93±0.41	7.81±0.36	4.03±0.24
After (20 sitting of Acupunture)	1.05±0.65	7.65±0.35	2.05±0.65

Abnormal regulation of TSH secretion has been reported in patients with major depression (5), without rise in serum free T4 and T3 level, presumably because abnormality in TSH control was central. Acupuncture is know to have haemostatic effect and has been reported to be effective in certain mental disorder including Parkinsonism through release of dopamine (6). It has been emphasized that depressive illness may facilitate the development of autoimmune thyroiditis which lead eventually to hypothyroidism (3) and that acupuncture causes immune-enhancing action (6).

Present study shows that endogenous depression alters thyroid function and acupuncture treatment twice a week for three weeks causes significant improvement in mental function and improvement in thyroid function might be at the level of hypothalmo-adenohypophysial thyroid axis.

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