Chapter - 8

SUMMARY
100 vitiligo patients, both male and female (50 each), age ranging between 10 and 66 years (mean 36 years) were selected from Dermatology Out Patients' Department of Calcutta Medical College. The cases were examined clinically for any systemic, endocrinal and metabolic disorders according to the proforma. The patients were selected only when the results of biochemical tests were within normal ranges. The patients were not administered any medications for at least one month prior to the studies. 100 normal, healthy subjects of the same age group were selected from the hospital staff as controls.

Thyroid function was studied by both in vivo and in vitro techniques. The in vivo studies included:

1. 2 hours thyroid/thigh ratio
2. 2 hours uptake
3. 24 hours uptake
4. 48 hours PB131I
5. Thyroid scan

These were performed after administration of 30 uCi Na131I. The in vitro studies included:

1. Cholesterol
2. T3
3. T4
The results showed decreases in all the parameters except cholesterol. Thyroid scan showed reduced uptakes in majority of the cases. There was no difference between males and females. The duration of onset of the disease had no relationship with thyroid function.

TSH test was performed in 20 vitiligo patients. The results prove that there was a positive stimulation of the thyroid gland. Hypothyroidism, observed in such cases, seems to be secondary in nature.

Pituitary function studies were performed in the same 100 patients by the estimation of TSH, ACTH and prolactin.

Only ACTH was significantly lower in vitiligo patients whereas TSH and prolactin showed no change. There was no difference between male and female patients. The levels of these hormones were not dependent on the duration of onset of the disease.

In 20 cases, TSH and prolactin responses to TRH were studied. The results show significant elevations of TSH and
prolactin at 20 and 60 mins in both male and female patients. The levels at 60 mins were higher than those at 20 mins, in contrast to controls where the peak was at 20 mins.

Adrenocortical function was studied in the same 100 patients by the estimation of cortisol. In 20 cases, ACTH stimulation test was performed. Cortisol was significantly raised in vitiligo patients but there was no difference between males and females. There were significantly higher responses to ACTH in vitiligo patients, both at 30 and 60 mins. Metopirone test was performed in the same 20 patients. The responses of cortisol were significantly higher in all the samples whereas the responses of ACTH were significantly lower.

All the studies, taken together, would indicate some derangement in pituitary-thyroid-adrenal cortex axis, probably involving hypothalamus.