

## NON SECRETOR STATE — A GOOD PROGNOSTIC SIGN IN VITILIGO

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### Summary

Among 210 patients of vitiligo 63.3 % were secretors and 36.7 % non-secretors. Therapeutic response to psoralen and U. V. rays was much better among nonsecretors than secretor vitiligo patients.

It is well known that blood group factors A and B are not confined to red blood cells alone but can also be detected in tissue cells and body fluids. In body fluids these exist not as antigens but as haptens and are termed as "group specific substances". Though their concentration in saliva is high, these are also present in serum, gastric juice, amniotic fluid, sweat, urine, tears, bile and milk. In about 20% of population, however, ABO group specific substances are almost absent in saliva and other body fluids<sup>1</sup>. Thus individuals whose saliva contains these substances are called secretors and those devoid of them are called non - secretors. This is under the control of a pair of allelomorphous gene S and s, with S dominant over s. While SS and Ss subjects are secretors, ss subjects are non - secretors. Group O individuals are divided into secretors and non-secretors according to whether their saliva contains factor H which is also present in saliva of A, B and AB group secretors<sup>1</sup>.

It has been shown that in vitiligo there is an increased susceptibility among secretors to develop the disease

compared to non-secretors<sup>2,3</sup>. Present study was undertaken to see if this genetically determined secretor state has any role to play in the prognosis of cure in vitiligo.

### Material and Methods

Two hundred and ten patients of vitiligo attending the skin out-patient department and one hundred normal persons as control were the subjects of this study. Diagnosis of vitiligo was clinical and all cases of leukoderma were excluded. Blood grouping was done and group specific substances in saliva determined using the technique of Stratton and Renton<sup>4</sup>. Anti H serum was used in subjects of blood group O. All the patients were put on systemic and topical psoralens and 5-10 min. sunlight exposure, two hours after oral intake of drug in the morning. Total duration of therapy was 1½ to 2 years, unless cured early or where patients defaulted. Response was graded as slight (less than 50%) and moderate (more than 50%) improvement, total cure and no response. Data was analysed statistically.

### Observations and Results

Out of 210 patients of vitiligo, 36 patients discontinued the treatment. Blood groups and secretor state of the 210 patients is given in Table 1.

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TABLE No. 1

	Total number	Secretors %	Nonsecretors %
Vitiligo	210	63.3	36.7
Normal	100	76	24

The result of therapeutic response of 112 secretors and 65 non-secretor patients, who continued treatment is tabulated (Table 2).

TABLE No. 2

	Slight improve-ment %	Moderate improve-ment %	Total cure %	No res-ponse %
Secretors	31.2	16	15.3	37.5
Nonsecretors	10.8	15.4	61.5	12.3

$\chi^2 = 45.9$  at  $(N_1 - 1)(N_2 - 1) = 3$ .  $P < .001$ .

**Discussion**

The results have indicated that vitiligo does not show any significant predilection towards the secretor state contrast to the reported findings of Sehgal and Dube<sup>2,3</sup>. However good

therapeutic response (Table 2) and shorter duration of therapy required by non-secretor vitiligo patients is quite significant. The test being simple and easy, it is suggested that all patients of vitiligo be subjected to it at the start of therapy to predict the prognosis of cure to some extent. The results confirm the findings of Sehgal and Dube<sup>5</sup>.

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