

ABO BLOOD GROUPS AND PSORIASIS

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Summary

ABO blood groups were determined in 73 patients of psoriasis and compared with those of 568 healthy blood donors. There was preponderance of blood group O in psoriasis patients in contrast to preponderance of blood group B in healthy blood donors. The ratio of difference between observed percentages and standard error reached level of significance in case of blood group O.

Genetic basis is the only firmly established aetiological feature in psoriasis (Abele et al¹, Ingram², Burch & Rowell³). Further, A and B antigens have been demonstrated in human epidermal cells (Nelken et al⁴). Thus it seems reasonable to investigate the possibility of there being an association between psoriasis and the ABO blood groups. The present report concerns the study of ABO blood groups in psoriasis patients seen in Medical College Hospital, Simla.

Material and Method

The material comprised 73 patients (57 males and 16 females) of psoriasis and 568 healthy blood donors seen during the period between August 1970 and July 1971. The ABO blood groups were determined by the technique as described by Dacie and Lewis⁵.

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Observations

The distribution of ABO blood groups in psoriasis patients and healthy blood donors is given in table below:

The distribution of various blood groups in psoriasis patients was compared with that of healthy blood donors and exposed to statistical analysis. The value of X^2 failed to reach the required level of significance. The ratio of difference between observed percentages and standard error is more than 2 in case of blood group O which is considered to be significant.

Discussion

Hargreaves and Hellier⁶ concluded that there is no association between psoriasis and any particular blood group. Similarly, MacSween and Syme⁷ and Wendt⁸ could not demonstrate any relationship between the ABO blood groups and psoriasis. On the other hand, Awachat and Sharma⁹ reported predominance of blood group B (44.6%) followed by blood group O (29.7%) in their study of blood groups in psoriasis patients but they did not compare their figures with controls while Gupta and Gupta¹⁰ reported significant predominance of blood group O. In the present

TABLE
The distribution of ABO blood groups

Blood Group	Psoriasis Patients (73)		Blood Donors (568)	
	Number	Percentage	Number	Percentage
A	15	20.6	142	25.0
B	22	30.1	205	36.1
AB	7	9.6	64	11.3
O	29	39.7	157	27.6

study, there is predominance of blood group O (39.7%) followed by blood group B (30.1%). The statistical analysis by ratio of observed differences to standard error shows significant preponderance of O group in psoriasis patients as compared to controls.

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False

The mucin substance in the subpapillary region though a histological criterion for the diagnosis of Lichen Myxedematosus, the γ globulin between the collagen can occur in any inflammatory condition in the dermis. Abnormal serum protein on electrophoresis in the post-gamma region has been shown by many workers.