



CORRELATION BETWEEN ABO BLOOD GROUPS AND *TRIDOSHAS* (AYURVEDIC BIOLOGICAL CONSTITUENTS)

*Dr. Mrs. Purandare V R, Dr. Mrs. Prasad N B**

Assistant Professor of Physiology, D Y Patil Medical College, Pimpri, Pune-18. Email: - neelamprasad8@gmail.com.

Professor of Physiology, D Y Patil Medical College, Pimpri, Pune-18. Email:- vidyapurandare108@yahoo.co.in.

corresponding author :- Assistant Professor of Physiology, D Y Patil Medical College, Pimpri, Pune-18. Email: - neelamprasad8@gmail.com.

Abstract:-

Ayurveda considers *Vata*, *Pitta* and *Kapha* or *Tridoshas* (Ayurvedic biological constituents) as main determinants of human constitution. In this study 800 healthy individuals from the age group of 18 to 25 years were screened for their *Tridoshas* (Ayurvedic biological constituents) and the correlation between *Tridoshas* and blood groups (A B O system) was studied. We tried to find out whether there is any correlation between predominant *Dosha* (Ayurvedic biological constituent) and blood groups. After finding out the *Tridosha Prakriti* (Ayurvedic constitution), it was found that out of 800 subjects, only 447 were having predominance of a single *Dosha* (Ayurvedic biological constituent). The reason for this was that the remaining 353 persons were having almost similar percentage of either two or all the three *Doshas*. That means they were having either *Dwandwaja Prakriti* (combination of two *Doshas*) or *Tridoshatmaka Prakriti* (combination of three *Doshas*). After correlating predominant *doshas* with A,B,O blood groups, significant correlation was found. *Kapha* (Ayurvedic biological constituent) was found to be correlated with blood group A, *Pitta* (Ayurvedic biological constituent) was correlated with blood group B and *Vata* (Ayurvedic biological constituent) was correlated with blood group O.

Key words:-

Tridosha Prakriti (Ayurvedic constitution), *Tridoshas* (Ayurvedic biological constituents), *Vata*, *Pitta*, *Kapha* (Ayurvedic Biological Constituents), blood groups (A B O system)

Introduction:-

Human constitutions are classified in various ways. *Tridosha Prakriti* (Ayurvedic constitution) is one of them. It describes the constitution of human beings according to the predominance of the *Doshas* viz. *Vata*, *Pitta* and *Kapha* (Ayurvedic Biological Constituents) which are supposed to be the three essential constituents of the living beings. Ayurvedic medicine gives a lot of importance to the *Tridosha Prakriti* of the person as far as his life style, maintenance of health, choosing right job, proper treatment etc. are concerned. *Tridosha Prakriti* (Ayurvedic constitution) can be determined by interviewing the person, getting filled a questionnaire, physical examination, finding out the psychological inclinations etc. In the questionnaire provided to the subjects we included subjective as well as objective parameters. Objective parameters were of course given more importance (1, 2, 3, 4). Psychological parameters like span of attention, fluctuation in attention, grasping ability, memory, etc were also given importance.

Many research workers have tried to find out *Prakriti* (Ayurvedic constitution) of different groups of people. Some have tried to find out association between *Prakriti* (Ayurvedic constitution) and different diseases. Some research workers have studied association between psychological inclinations and *Prakriti*

(Ayurvedic constitution). Some have tried to find out whether parameters of *Prakriti* (Ayurvedic constitution) can be helpful in doing differential diagnosis of different diseases without taking help of pathological investigations (5). The present study was designed to find out whether there is any correlation between *Tridoshas* (Ayurvedic biological constituents) and blood groups.

Materials and Methods:-

This project includes determination of Tridosha Prakriti of 800 healthy individuals from the age group of 18-25 years and finding out their blood groups by tile agglutination method. The *Tridosha Prakriti* (Ayurvedic constitution) was determined according to the description given in *Ayurvedic Text Books* viz. the *Charak Samhita* (1), *Sushrut Samhita* (2) and *Sartha Vagbhata* (3).

The subjects were given a proforma which contained subjective and objective parameters. The subjective parameters were of psychological and physiological types and the objective parameters were of physical and physiological types.

More importance was given to the objective parameters than the subjective ones.

After finding out Tridosha Prakriti of these 800 subjects it was found that many were having almost equal percentage of either two or three Doshas. That means they were having either *Dwandwaja Prakriti* (combination of two Doshas) or *Tridoshatmaka Prakriti* (combination of three Doshas). So it was important to find out whether a single Dosha predominates in some of them. Hence we found percentage score of all the 800 people individually under Vata, Pitta and Kapha (which were named X, Y and Z respectively).

So if $X > Y + Z$, the person can be said to be Vata predominant,

if $Y > X + Z$, the person can be said to be Pitta predominant,

and if $Z > X + Y$, the person can be said to be Kapha predominant.

Thus we found that 447 persons out of 800 were having predominance of a single Dosha.

The blood groups were determined by tile agglutination method, by using commercially available Antiserum A and Antiserum B (Tulip Diagnostics (p) Ltd).

After doing this, correlation between predominant Doshas and A, B, O blood groups was studied. Significant association was found after applying X^2 test ($P < 0.05$).

This study was carried out in B J Medical College & Sassoon General Hospital, Pune, India, after taking permission from ethical committee. These subjects were drawn from the blood donation camps organized by the institute.

Observations and results:-

It was found that out of 800 subjects, only 447 subjects were having predominance of a single *Dosha* (Ayurvedic Biological Constituent). Remaining 353 subjects were having combinations of *Doshas* (Ayurvedic Biological Constituents), hence they were excluded from the study. The correlation between the predominant *Dosha* (Ayurvedic Biological Constituent) and the blood groups was studied statistically. It

was seen that *Kapha* (Ayurvedic Biological Constituent) was associated with blood group A, *Pitta* (Ayurvedic Biological Constituent) was associated with blood group B and *Vata* (Ayurvedic Biological Constituent) was associated with blood group O. Blood group AB could not be associated with any *Doshas* (Ayurvedic Biological Constituents) probably because of its small sample size.

Table:- Association between blood groups and the predominant *Dosha* (Ayurvedic Biological Constituent)

Blood group	<i>Vata</i>	<i>Pitta</i>	<i>Kapha</i>	Total
A	29	35	58	122
B	34	88	13	135
O	117	21	16	154
AB	21	12	3	36
TOTAL	201 (45%)	156 (35%)	90 (20%)	447

Discussion:-

We found that the number of *Vata* predominant persons was maximum and that of *Kapha* predominant ones was minimum. Out of 447 subjects, 201 i.e. 45 % were *Vata* predominant, *Pitta* predominant were 156 i.e. 35% and *Kapha* predominant were 90 i.e. 20%.

In the present study correlation between predominant *Doshas* (Ayurvedic Biological Constituents) and blood groups was as follows-

Blood group A *Kapha* predominance

Blood group B *Pitta* predominance

Blood group O *Vata* predominance

Blood group AB could not be correlated with any *Dosha* (Ayurvedic Biological Constituent) probably because of its small sample size.

The method of finding the predominant *Dosha* in the present study was similar to the studies of T. Gurunatham et al. (5)

Studies conducted by Yogita Ghodke et al (6) and P. Bhushan et al (7) were also based on classification of subjects according to *Tridosha prakriti* (Ayurvedic constitution).

Conclusion:-

In the present study, an attempt has been made to associate A B O blood groups with the predominant *Doshas* (Ayurvedic Biological Constituents). We got association between group A and *Kapha*, group B and *Pitta* and group O and *Vata*. As there is association between the blood groups and the *Doshas* (Ayurvedic Biological Constituents) and as blood groups are genetic markers, the association may be further extended to use *Prakriti* (Ayurvedic biological constitution) for genetic study. This study is yet incomplete. Similar type of study can be made by using many more genetic markers.

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