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Research Article

RELATION BETWEEN PRAKRITI (AYURVEDIC CONCEPT OF CONSTITUTION) AND BLOOD GROUP AMONG AYURVEDIC STUDENTS

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ABSTRACT

Background: The word 'Prakriti' means 'nature' and this reflects the natural state of human beings on an anatomical, physiological, and psychological level. Prakriti or Constitution is an important concept of Ayurved. Maintenance of health, prevention of disease, achieving longevity & treatment of diseases depends on this fundamental theory of understanding human being. Ayurveda considers Vata, Pitta and Kapha or Tridoshas (Ayurvedic biological constituents) as main determinants of human prakriti. Ayurveda classifies entire human population into seven constitutional types (Prakriti), based on the dominance of any single or a combination of two or three Doshas. The present study was carried out to study the relation between blood groups (A B O system) varied in the different *prakriti* subtypes was studied.

Aims: To study the Relation between prakriti & blood group.

Objectives of the Study: 1) To study the prakriti with the subjective parameters mentioned in the Text in Ayurvedic Students. 2) To study the blood group of each student. 3) To study the Relation between prakriti & blood group.

Material & method: After obtaining Institutional Ethics Committee permission, normal healthy individuals of either sex between the age group 17 to 22 years were recruited in the study. Their prakriti evaluation was done using a standardized validated questionnaire 1) Assessment of Prakriti among the Volunteers. 2) Assessment of Blood Group.

Result: It was seen that Vata Prakriti was associated with blood group A, Pitta Prakriti was associated with blood group O and Kapha Prakriti was associated with blood group B.

Conclusion: Association was found between *Prakriti* and Blood group in some extent.

Keywords: *Prakriti*, Blood groups, Tridosha, Vata, Pitta, Kapha.

INTRODUCTION

The word 'Prakriti' means 'nature' and this reflects the natural state of human beings on a physical, physiological, and psychological level. The concept is claimed to be useful in predicting an individual's susceptibility to a particular disease, prognosis of that illness and selection of therapy¹⁻³. Ayurveda attributes these constitutional characteristics of an individual to the preponderance of certain "doshas". Three main doshas are described, viz. vata, pitta and kapha. Kapha dosha is the "anabolic", synthetic dosha, responsible for growth and maintenance of structure. The pitta dosha is the one responsible for metabolism, including digestion in the gut, and cellular or sub-cellular metabolism². Vata dosha is responsible for movement (muscular, nervous energy etc.). Based on the predominance of individual doshas, there are three major types of prakriti named after predominant dosha, viz., vata, pitta and

kapha. The prakriti is believed to be determined at the time of conception and is influenced by the milieu interior of the womb and the dietary habits and lifestyle of the mother³. These prakritis exhibit attributes of the dominant Dosha in physical, physiological and psychological characteristics. The disturbance in equilibrium of these doshas can lead to disease according to the prakriti of the person for example; a pitta prakriti person is described to be more prone to peptic ulcers, hypertension, and skin diseases, a vata prakriti person to backache, joint aches and crackling joints while individuals with kapha prakriti are prone to obesity, diabetes and atherosclerosis¹⁻⁶. Since prakriti has been described to have genetic origin in Ayurvedic texts³.

There is certain relation between parents and inborn child in blood grouping. The heredity gene is directly concerned with the inborn child's metabolic pattern too. The inborn metabolic pattern of an individual is the continuation of metabolic

pattern of the parents. So these relations according to modern discovery are due to gene. But around thousands of years ago no word called “gene was used. In fact the pitrij bhav (Father’s character) an matrij bhav (Matrij character) refer to gene XX and XY, it is not so direct but pointing towards these genes. Still re discovery of prakriti is not there in modern techniques⁵.

A blood type (also called a blood group) is a classification of blood based on the presence or absence of inherited antigenic substances on the surface of red blood cells (RBCs). These antigens may be proteins, carbohydrates, glycoproteins, or glycolipids, depending on the blood group system. Some of these antigens are also present on the surface of other types of cells of various tissues. The blood type (or blood group) depends on the types that are been passed down to you from your parents. So Blood group & Prakriti both are inborn, constant in nature, & there are no change .On the basis of this ,we studied the Relation between prakriti & blood group among Ayurvedic students.

Aims

To study the Relation between prakriti & blood group among Ayurvedic students.

Objectives of the Study

- 1) To study the prakriti with the subjective parameters mentioned in the Text in Ayurvedic Students
- 2) To study the variability of blood group of each student
- 3) To study the Relation between prakriti & blood group Among Ayurvedic students

MATERIALS AND METHODS

100 randomly selected clinically healthy volunteers belonging to the Single constitutional types were studied for the variability of Blood Group.

Observational cross sectional study was conducted among first year ayurvedic students at Mahatma Gandhi Ayurvedic College and research centre, Salod (H), Wardha. Study was conducted from April 2014 to March 2015. All the 100 Healthy Students between 17 to 22 year age group were selected for the study.

Approval was taken from the Institutional ethics committee (Datta Meghe Institute of Medical sciences, DU, Wardha) on 5.3.2014 with Ref.No. DMIMS (DU)/IEC/2013-14/565. Informed written consent was taken from the study subjects.

Students were interviewed by predesigned questionnaire that contains the information about Prakriti and blood groups were

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

Assessment Criteria

1) Assessment of Prakriti among the Volunteers- Preparation of the Questionnaire

The Prakriti (constitution) was determined according to the description given in Ayurvedic Text Books viz. the Charak Samhita (1), Sushrut Samhita (2) and Sartha Vagbhatta (3). For the study, the prakriti of each volunteer was assessed using the validated questionnaire. It was further confirmed by an Ayurvedic physician to assess various physical, physiological and psychological characters as described in Ayurvedic texts⁵. 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.

These volunteers were enrolled in the study only after undergoing the clinical examination and being declared clinically healthy and physically fit. A written consent was obtained from them to participate in the study. These 100 volunteers were then subjected to some simple experiments in the human physiology laboratory of the department of Kriya Sharir as described in the following paragraphs.

2) Assessment of Blood Group:

Blood group was also determine with a kit from Sera Eryclone, manufactured by Tulip Diagnostics (P) Ltd. Blood is drawn from by capillary method. The test to determine your blood group is called ABO typing. Blood sample is mixed with antibodies against type A and B blood, and the sample was checked to see whether or not the blood cells stick together (agglutinate). If blood cells stick together, it means the blood reacted with one of the antibodies.

OBSERVATIONS AND RESULTS

The correlation between the Prakriti and the blood groups was studied. It was seen that Vata Prakriti was associated with blood group A, Pitta Prakriti was associated with blood group O and Kapha Prakriti was associated with blood group B. 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 Prakriti

Blood Group	Vata	Pitta	Kapha	Total
A	10	4	5	19
B	6	8	13	27
AB	1	7	5	13
O	6	25	10	41
Total	23	44	33	100

We found that the number of Pitta predominant persons was maximum and that of vata predominant was minimum. Out of 100 subjects, 23 % were Vata predominant, Pitta predominant were 44 % and Kapha predominant were 33%.

DISCUSSION

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 investigations⁷⁻⁸. The present study was designed to find out whether there is any correlation between Tridoshas (Ayurvedic biological constituents) and blood groups.

Studies conducted by Dr. Mrs. Purandare V R “Correlation Between ABO Blood Groups And Tridoshas (Ayurvedic Biological Constituents)” in 447 volunteers, the 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 O⁹.

Dr. Gaikwad, Tilak Ayurved Mahavidyalaya, Pune. tried to find out relation between blood group & constitution. 500 volunteers kapha constitution people have tendency to be ‘B’ positive blood groups, Pitta constitution people have tendency of ‘O’ positive blood Groups, Vata constitution people have tendency of ‘A’ positive blood groups.

Dr. Mohinder Pal Singh studied ratio between Kapha pradhan prakriti & blood group with respect to sex in Bharati Vidyapeeth University, Pune. The correlation was found that Kapha biotype male patient have predominantly B positive blood group & Kapha biotype female patient have predominantly O positive blood group.

Dr. Supriya Bhalerao studied prakriti (Ayurvedic concept of constitution) and variations in platelet aggregation. The findings of study however can have implications with respect to pharmacogenomics & study of dose-response relationships. These findings can also prove useful for the randomization in clinical trial design, as randomization would be best within the specific prakriti or dosha predominant sub-groups than across an aggregated population¹⁰.

In the present study correlation between Prakriti (Ayurvedic Biological Constituents) and blood groups was found, Blood group A with Vata predominance, Blood group B with kapha predominance, Blood group O with Pitta predominance & Blood group AB could not be correlated with any Prakriti probably because of its small sample size.

CONCLUSION

In the present study, an attempt has been made to associate A B O blood groups with the Prakriti predominant Doshas. We got association between group A and vata, group O with Pitta

and B with Kapha. As there is association between the blood groups and Prakriti . Blood groups are genetic markers; the association may be further extended to use Prakriti for genetic study. A large sample size is necessary for the derivation of positive conclusion.

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