

# Association of ABO Blood Group with Different Prakriti Types in Infants

Singh Garima<sup>1</sup>, Singh B.M<sup>2</sup>, Singh Sanjay<sup>3</sup>

<sup>1</sup>Research Scholar Dept. of Kaumarbhritya, Faculty of Ayurveda, IMS BHU.

<sup>2</sup>Professor & HOD Dept. of Kaumarbhritya, Faculty of Ayurveda, IMS BHU.

<sup>3</sup>Associate Professor Institute of Computer Science, IIT, BHU

Corresponding Author: Singh Garima

## ABSTRACT

**Introduction:** In an individual three entities work in conjunction to maintain homeostasis throughout the life starting from the conception. Various studies carried out in adults and some in infants, have shown the relation of *Prakriti* with the association of blood group.

**Aim and Objective:** The aim of the study is to find an association between *Prakriti* and blood group of infants.

**Material and Methods:** For this study to be carried out, a total of 100 infants were selected. Assessment of *Prakriti* was done using prototype research software (PRS-IPA) and Blood group sample was taken after 24 hours of neonate birth and investigations were carried out in CCI lab, S. S. Hospital, BHU and Chi-square test was applied to test the association between *prakriti* of infant and incidence of blood group of infant.

**Results:** Maximum (70%) Vata *Prakriti* infant belonged to A+ blood Group whereas maximum Pitta (60%) and Kapha Pitta (70%) *Prakriti* were O+ blood Group. The maximum number of infant belonged to Kapha *Prakriti* (66%) were B+ blood group, followed by Vata Pitta *Prakriti* (28%) were A+ blood group, Vata Kapha *Prakriti* (84%) were AB+ blood group and Chi-square test = 50.9 and d. f. = 6 and P < 0.001 show significant association between *Prakriti* of infant and blood group of infant.

**Kew-words:** Blood group, *Prakriti*, infant, Vata, Pitta, Kapha.

## INTRODUCTION

Ayurveda is a natural health care system that originated in India more than 5000 years ago. they offers its modalities by the way of Ahara (diet), Vihara (lifestyle), and Ausadhi (medication), which are three pillars of *Prakriti* - based making it a holistic science. It emphasizes the treatment of disease in a highly individualized manner as it believes that every individual is unique and has different constitution. [1, 2]

*Pra* means the "beginning", "Commencement" or "Source of Origin" and *kṛti* means "to perform" or "to form". Put together, *Prakriti* means "Natural form" or

"Original form"). The word *Prakṛti* means "Nature" or natural form of the build and constitution of the human body. The dictionary meaning of word 'Prakṛti' is nature, character, and constitution, original or primary substance. [3]

A number of factors are responsible for the formation of individual *Prakriti* According to Charaka Samhita the following factors contributes on formation of *Prakriti* the time of conception and thereafter during intrauterine life- Unchangeable or definite characteristics or instinct of sperm and ovum which contribute information of fetal or child

Psychosomatic constitution, Unchangeable or definite characteristics or instinct of season and condition of uterus which contribute information of fetus or child Psychosomatic constitution, Unchangeable or definite characteristics or instinct of Food and regimens/environment of mother which contribute information of fetal or child Psychosomatic constitution, Unchangeable or definite characteristics, instinct or nature of Mahabhtvikara [disease], which contributes information of fetal or child psychosomatic constitution. [4-6]

There is a certain relation between mother, father and unborn child in blood grouping. The heredity gene is directly associated with the unborn child's metabolic pattern too. [7,8] The inborn metabolic pattern of an individual is the continuation of the metabolic pattern of the parents. So these relations according to modern discovery are due to gene. But in Ayurveda medicine the Father's character and Mothers character refer to gene XX and XY, it is not so direct but pointing towards these genes. Still rediscovery of Prakriti is not there in modern techniques. [9] 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). The 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 changes. [10] On the basis of this, we studied the Relation between Prakriti & blood group among infants.

## MATERIALS AND METHODS

A total 100 full term-appropriate for age [FT (AGA)], 7 days old, healthy neonates; delivered by uncomplicated spontaneous vaginal delivery (SVD) and elective lower segment cesarean section (LSCS) without showing any sign of fetal distress; were randomly selected for the study from the tertiary hospital (Sir Sunderlal Hospital, Varanasi, Uttar Pradesh) after getting written informed consent from

the parents, and obtaining Ethical Committee Clearance (ECC No- ECR/BHU/IMS/UP/2014/Re-registration 2017 dated. 31.01.017) and the Chi-square test was applied to test the association between prakriti of infant and incidence of blood group of infant.

Parents, who were not willing for the participation of their baby in this study, pre-term, post-term, and full term (SGA/LGA) baby associated with any congenital anomalies, suffering from any disease at registration or get any life-threatening disorder on subsequent follow-ups were excluded from the study.

### Prakriti Assessment:

Prakriti assessment in each infant was carried out through PRS-IPA [11] (Prototype Research Software at registration and subsequent follow-ups at 3months, 6 months, 9 months, 12 months of age. When infant was found equal contribution of each dosa and with variation of less than 10% variation among three considered as Tridosha Prakriti, When two *Dosha* separately have 66.667% i.e. each *Doshaja* characteristic will be more than 33.333% (separate to each other) and rest of the single *Dosha* will have less than 33.333% sharing of own characteristics, then its known as *Dvandaja* Prakriti. For single *Doshaja Prakriti*, only one *Doshaja* should have more than 40% own characteristics and none of the rest *Dosha* will have own characteristic equal or more than 33.333% share.

**Assessment of Blood Group of infants:** Blood group sample was taken after 24 hours of neonate birth and investigations were carried out in CCI lab, S. S. Hospital, BHU.

## OBSERVATION AND RESULT

The association between Prakriti and blood group was studied (Table No-1). It was seen that Maximum (70%) Vata Prakriti infant belonged to A+ blood Group whereas maximum Pitta (60%) and Kapha Pitta (70%) Prakriti were O+ blood Group.

Table No: 1 Showing incidence of blood group of infants as per Prakriti.

Blood group (baby)	Prakriti of infant						Total (n=100)
	Vata (n=10)	Pitta (n=28)	Kapha (n=18)	Kapha pitta (n=10)	Vata pitta (n=21)	Vata Kapha (n=13)	
A <sup>+</sup>	7 70%	3 11%	0	0	10 47%	1 7%	21 21%
AB <sup>+</sup>	0	1 3%	2 11%	2 20%	4 19%	11 84%	19 19%
B <sup>+</sup>	2 20%	6 22%	12 66%	1 10%	6 28%	1 7%	28 28%
O <sup>+</sup>	1 10%	19 60%	4 22%	7 70%	1 4%	0	32 32%

The maximum number of infant belonged to Kapha Prakriti (66%) were B+ blood group, followed by Vata Pitta Prakriti (28%) were A+ blood group, Vata Kapha Prakriti (84%) were AB+ blood group.

Table No-2 Chi-square test: to test the association between prakriti of infant and incidence of blood group after pooling the cells (as many cells accepted frequency was less than 5).

Blood group Of baby	Prakriti of infant		
	Vata+VataKapha+Vata Pitta	Pitta	Kapha+Kapha Pitta
A <sup>+</sup>	8	3	0
AB <sup>+</sup>	15	1	4
B <sup>+</sup>	9	6	13
O <sup>+</sup>	2	19	11

Chi-square statistical test has been applied in above table after pooling (as many cells accepted frequency was less than 5), to show the association between prakriti of infant and incidence of blood, The value of Chi-square = 50.9, degree of freedom (df) = 6 and P < 0.001 show that Incidence blood group of infant have significant association between Prakriti of infant.

## DISCUSSION

There are many studies have been carried out on Prakriti assessment and shown different trends of blood group in respect to their Prakriti in adult samples and some of them in infants samples, in which some result support to other study and some gives different trends. [12-15]

In Present study, Vata Prakriti infants have A+ blood group and this blood group also found higher Percentage in Vata-Pitta (47%) group of the infant. The higher range of A+ blood group in Vata Pitta group of infants predicts that A+ blood group may have a role in the manifestation of Vata Characteristics.

In Kapha Prakriti the predominant blood group is B+ and infants belongs to Vata-Kapha Prakriti AB+ blood occurs in higher Percentage (84%).

In Pitta Prakriti predominant blood group is O+ and an Infants belongs to Kapha- Pitta Prakriti also found O+ blood group in the higher range, which suggest that this blood group may have a role in Pitta characteristics in infants.

Chi-square test = 50.9 and d. f. = 6 and P < 0.001 show significant association between Prakriti of infant and blood group of infant.

## CONCLUSION

In the present study, an attempt has been made to the association of A B O blood group with the Prakriti predominant doshas in infants. We find an association between A+ blood group for Vata Prakriti, O+ blood group for Pitta Prakriti, with the B+ in Kapha Prakriti blood group of infants. The P < 0.001 also shows highly significant association between Prakriti of infant and blood group of infant.

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