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RELATION OF ABO BLOOD GROUP SYSTEM WITH OPHIDOPHOBIA

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ABSTRACT

ABO blood typing system was developed to match the blood types and distinguish the blood group types from one individual to another individual. Transfusion of blood became easy by ABO blood group system. Universal donor and universal recipient for blood transfusion was O blood group and AB blood group respectively. Ophidophobia is an extreme fear from snakes. It usually develops during an early age when parents aware their children about the snakes. It may be psychologically or may be due to other reasons. Objective was to correlate the Ophidophobia with ABO blood group typing. We take the blood samples from individuals and experiment was performed in the laboratory to check the ABO blood groups. Percentage of both male and female with B+ blood group is more. Therefore, there is a correlation between ophidophobia and ABO blood typing.

Keywords: Blood, Ophidophobia, Snakes, ABO blood group

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INTRODUCTION

ABO blood typing was first discovered by the Landsteiner in 1901. The ABO blood typing was developed to match the blood groups between the individuals. The transfusion of blood between the individuals became easy by this system. The classification of blood by ABO blood typing, the properties of red blood cells, which were inherited from parents to their children. On the surface of red blood cells, antigens are present. There are four types of ABO blood typing that is AB, B, A, and O. (Hayden, Mann, Krassnig, & Dickert, 2006) Two types of the antigens and two types of antibodies are present. Antibody B will be produced by the individual who has blood group A and these individuals have A antigen. Antibody A is produced by the individuals who have blood group B and they have B antigen. Both antibody A and B are produced by the individuals who have O blood group but they do not show any antigen either A or B. Antibody A and B are not produced by the individuals who have AB blood group but they have both the antigens A and B. For the transfusion of blood O blood group, considered as the universal donor and AB considered as the universal recipient. (Matzhold, Drexler, & Wagner, 2016; Songjaroen et al., 2018)

The word ophidophobia is a Greek word, which means phobia of serpent. Individuals who suffered from ophidophobia may not be aware of their fear of snakes. This phobia may develop in early childhood. It may be mild or may be serious type of phobia. Most of the people suffer from ophidophobia because of the

appearance of snakes or may be due to their venom. Individuals who suffer from snake phobia not only scared from snakes but also scared from all the things related to snakes. (Isbell, 2006) They have extreme fear of snakes they cannot go outside where there is a chance of appearing snakes. The cause of ophidophobia may be psychologically or may be due to some bad experience in the past or it may be due to genetic disorder. Exposure therapy, Cognitive behavioral therapy, hypnosis usually used to overcome the ophidophobia. Other treatments are also available for the individuals who are suffering from ophidophobia. (Nave, Tolin, & Stevens, 2012; Polák, Sedláčková, Nácar, Landová, & Frynta, 2016)

Study Objective

Study objective was to check the correlation between ophidophobia and ABO blood group system.

MATERIALS AND METHODS

Materials

The kit of monoclonal antibodies, Alcohol swabs, Blood sample, sterile cotton balls, gloves, clean glass slide, dropper, toothpick require for ABO blood typing test. Monoclonal antibody kit must be placed in an ice tray.

Methodology

Sample Collection

Collect the sample of blood randomly from the 100 individuals for ABO blood typing test

Procedure

ABO blood grouping test was performed in the laboratory. Place all the materials on the table. Clean the area of the body with alcohol swab from where we take the blood. Prick the finger of the individuals. Then place three drops of blood separately on clean slide. We take Anti-A bottle dropper is used to place the Anti-A in the first drop of blood. Take Anti-B and by the help of dropper falls a drop on second drop of blood on the glass slide. Take Anti-D and we place drop in the third drop of blood. Mix the content in each well with the help of the toothpick. Then observe the results and record it.

RESULT

Total 100 individuals of both male and female give their blood samples in the laboratory. We asked the individuals about ophidophobia most of the individuals had ophidophobia. Mostly female was affected by the ophidophobia. In case of ophidophobia in male, 20% male with A+ blood group, 18% male with AB+ blood, 27% male with B+ blood, 9% male with O+ blood group and 18% male with O- blood have ophidophobia. While in case of no

ophidophobia in male 1% male with A+ blood group, 6% male with B+ blood group and 1% male with O+ blood group have no ophidophobia. Therefore, percentage of male with B+ blood group is more. In case of ophidophobia in female, 13% female who have A+ blood group, 5% female who have A- blood group, 7% female with AB+ blood group, 2% female have AB- blood group, 32% of the female have B+ blood group, 4% female showing B- blood group, 22% female showing O+ blood group and 6% of females with O- blood group. In case of no ophidophobia 1% of females with AB+ blood group, 5% female with B+ blood group and 3% of female showing O- blood group. Therefore, percentage of females in this research with B+ blood group is more. Most of the individuals, both male and female with B+ blood have ophidophobia. Therefore, there is a correlation between ophidophobia and ABO blood typing. There may be a genetic relation between ophidophobia ABO blood typing.

Table 1: Relation of ophidophobia with ABO blood typing

Blood group	Ophidophobia								No Ophidophobia							
	A+	A-	AB+	AB-	B+	B-	O+	O-	A+	A-	AB+	AB-	B+	B-	O+	O-
Male	20%	0%	18%	0%	27%	0%	9%	18%	1%	0%	0%	0%	6%	0%	1%	0%
Female	13%	5%	7%	2%	32%	4%	22%	6%	0%	0%	1%	0%	5%	0%	3%	0%

CONCLUSION

It was conclude from the study that there was a correlation between ophidophobia and ABO blood typing system.

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