

RESEARCH ARTICLE

Association between blood group and use of contact lenses

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ABSTRACT

The objective of the present study was to associate the blood grouping with the use of contact lenses. There were 176 subjects that test their blood group using general use for identification of blood group. These subjects marked our prepared questionnaire according to their blood group with the use of contact lenses.

Keywords: Blood group, Contact lens, Rh factor and Antiserum

INTRODUCTION

Blood is classified into different groups on the basis of the presence or absence of antigens on the surface of red blood cells. These antigens are called antigen A and antigen B. The A blood group contains antigen A and B antibody. The B blood group has antigen B and antibody. The A blood group has both antigen A and B but has not antibody. The blood group O does not contain antigen but has both A and B antibodies. Another blood typing system which commonly used is the rhesus blood group system. In this system, if you have an Rh antigen on the surface of your red blood cells, then you have Rh-positive blood group system. If you do not have Rh antigen on the surface of your red blood cells, then you are said to be rhesus negative. Many of the people in Australia are Rh positive.^[1]

Contact lens is simply a thin lenses directly placed on the surface of the eyes. Contact lenses are considered as medical devices. These can be used to correct vision or for therapeutic reasons. It was calculated that millions of people throughout the world used contact lenses. It is considered that worldwide market supply contact lenses in excess amount. There are many people that used contact lenses in place of vision glasses. Cosmetics are the main motivating factor. People used contact lenses to change appearance of their eyes. In some

cases, contact lenses are cheap and cause irritation. Many people do not use contact lenses due to its many side effects.^[2]

The objective of recent study was also associate blood group with the use of contact lenses.

MATERIALS AND METHODS

This study contains students of BZU, Multan, and the age of student between 18 and 22.

Blood grouping

We were taken slide and put three drops of blood on it. We were given three antiserum named as A, B, and D. All these antiserum help me to identify different blood groups. Antiserum A was used for the identification of blood Group A. Antiserum B was used for the identification of blood group B, and D antiserum was used for positive and negative blood group mixed them with a needle. Then, we were concluded if drop of blood A and C disappear, it shows that blood group is A+ and if A disappear and C does not disappear, it shows that blood group is A-. If drop of blood B and C disappears, it shows that blood group is B+ and if drop of blood B disappears and C does not disappear, it shows that blood group is B-. If drop of blood AB and C disappears, it shows that blood group is AB+ and if AB blood drop does not disappear and C disappears, it shows that blood group is AB-. If blood drop of AB and C does not disappear, blood group is O- and if blood group A

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Table 1: Association of blood group with the use of contact lenses

Blood group	Male		Female	
	No	Yes	No	Yes
A ⁺	0	4.54	6.82	6.81
A ⁻	0	0.2	0.56	0.58
B ⁺	0	5.14	5.14	23.87
B ⁻	0	0.57	1.14	1.13
AB ⁺	0	0.58	1.70	3.98
AB ⁻	0	0.57	0	0.2
O ⁺	0	5.11	8.52	16.48
O ⁻	0	0.1	0.57	5.68

and B disappear and C does not disappear, blood group is O⁺.

Project

Questionnaire was prepared about association of blood group with the use of contact lenses.

Statistical analysis

Statistical analysis was performed using MS Excel.

RESULTS AND DISCUSSION

Effects of ABO blood group on the use of contact lenses given in Table 1. The total of 176 subjects performed this study. 28 students used contact lenses and said yes and 148 were not used contact lenses and said no. These results show that most of people like males of any blood group were not used contact lenses, but females were also used contact lenses. Most of females of blood group B⁺ used contact lenses, but females and males of blood group AB⁻ use contact lenses in less number. Females of blood group O⁺ were also used contact lenses, but male does not use contact lenses.

Questionnaire-based studies have been given important outcome in the current researches.^[3-10] This research has not done before. This research shows different blood groups vary with the use of contact lenses. This research indicates that people like majority of males were not used contact lenses, but most females were used contact lenses. Some blood groups are suitable for contact lenses

and some are not suitable. Most of the people of blood group B⁺ use contact lenses, but males and females of blood group (AB⁻) were not used contact lenses. People of blood group O⁺ also used contact lenses, but most females of blood O⁺ do not contact lenses instead of males. Sometimes, contact lenses are contaminated and could infect your eyes. In some cases, blood group does not match with contact lenses.

CONCLUSION

It was concluded from the present study that the contact lenses used is maximum for B⁺ blood group and minimum for AB⁻ blood group B⁺ contain 12 males and 40 or above females. Then, we concluded that most of females of blood group B⁺ used contact lenses, but males used in less amount. Blood group AB⁻ has one male and two females.

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