

# The connection of blood grouping with eye blinking

Muhammad Imran Qadir, Muhammad Tanveer

Qadir MI, Tanveer M. The connection of blood grouping with eye blinking. *J Exp Med Biol* 2019;1(1):9-10.

The objective of present study was to correlate blood grouping with Eye Blinking. Total of 174 subjects participate in this study. The subjects were students in Baha Uddin Zakariya University Multan Pakistan. There are many types of blood group systems but the two most ones are ABO and Rh blood group system. The ABO blood grouping classification includes two antigens and two antibodies found in human clan. There are Antigens A and B and the antibodies are A and B. The materials for the test are Anti

A, B and D sera, blood lancet, alcohol swabs, clean glass slides, mixing sticks and ice tray. Set the table with all the materials required. Rub alcohol wipe at the area where the blood sample will be taken. I consent subjects about their eye blinking. Some of them told that they don't blink more and some said that they blink fast. Mostly tell that their eye blinking is normal while in some subjects this is above than normal. It was concluded from the present study that O+ blink more while A- and AB- blink less.

**Key Words:** *Eye blinking; Blood group; Antibodies; Antigens; Blood lancet*

## INTRODUCTION

The organization of blood is founded on existence or deficiency of antibodies and innate antigens on the top of red blood cells. Blood varieties are inborn and show involvement from both parents. There are many types of blood group systems but the two important are ABO and Rh blood set system. The ABO group scheme includes two antigens and 2 antibodies in human blood. Antigens are A and B and the antibodies are A, B. The antigens appear on the RBC and antibodies inside the serum. About the antigen of the blood all human is categorized in four groups individuals with antigen A (group A), persons with antigen B (group B), people with both antigens A and B (group AB) and beings with neither antigen (group O). The antibodies near jointly with antigens are located as antigen A with antibody B, B with antibody A, antigen AB has none antibodies and null antigen group O has both A and B antibodies. By knowing blood types blood transfer can be easily done [1]. The Rh blood unit is the second noteworthy blood group sorting. The important Rh antigen is the D antigen. The presence or lack of D antigen is shown by + or - sign. The A- assembly is type A and does not contain Rh D antigen. There is a clumping reaction between the same antigen and antibody. So transfusion of blood from donor to recipient having the same antigen and antibody will be fatal [2].

Blinking is a physical function. It is a half-automatic quick closing of eyelid. A blink is determined by potent shutting of eyelid of elevator palpebral superiors and beginning of palpebral part of orbicularis oculi not maximum exposed and closed. It is necessary function of eye which helps widen tears and eliminate annoyances from surface of cornea. Blinking keeps eye lubricated. Researcher ponder that blinking helps us unlock our care. Cortical action decrease in dorsal system and enhance in default-mode network linked with internal web. Blinking rate can be disturbed by factors such as weakness, eye injury, treatment, and disease. The blinking frequency is defined by blinking midpoint also can be upset by outdoor stimulus. Corneal eye blinking is started by free nerve endings in cornea and involves trigeminal nerve and ganglion and nucleus and orbicularis oculi. There are some types of eye blinking [1] natural blinking that is done without outside inducement and internal struggle. This blinking done in pre-motor brain trunk and occurs without sensible work like breathing, digestion [2]. Reflex blink happens in reply to outer stimulus like connection with cornea or object that seem quickly in head of eye. It happens faster than spontaneous blink. Occur due to tactile stimuli like eyelash, dazzle reflex [3] controlled blink has greater amplitude than reflex

blink. It uses all of three partitions of orbicularis oculi muscle. Women blink 32% more than other woman that uses oral contraceptives. Each blink is of 2-10 seconds average blink is 10 blink per minute. Average people blinks some 15-20 times per minute so regularly our eyes are closed for roughly 10% of our awakening hours overall.

The objective of present study was to correlate blood grouping with Eye Blinking. From this correlation more, blinking process can be stopped by comparing blood group with eye blinking. It will be helpful in future.

## MATERIALS AND METHODS

### Blood grouping procedure

When a patient desires a blood transfusion then it is important that the blood given by transfusion is friendly with the patient's blood. This is because if incompatible blood is transfused, the patient can face dangerous allergic reactions even death. The security is given through making an experiment of testing ABO blood groups. The materials for the test are Anti A, B and D sera, blood lancet, alcohol swabs, clean glass slides, mixing sticks and ice tray. Set the table with all the materials required. Rub alcohol swab at the area where the blood sample will be taken. Pierce the lancet into fingertip and take three blood drops on the slide. Use the dropper to put drop of anti A onto 1st slump of blood. Take the Anti B onto second bead of blood. Take the Anti D onto third droplet of blood. Take mixing sticks and mix each drop well. When mixing done wait for a while to watch the result.

If the red cells agglutinate when mixed with a reagent containing Anti A antibody, then the patient blood group has antigens A and hence his blood group is A. The procedure is repeated with anti B and D. The clumping in respective antibodies shows blood group A, B and O with positive or negative sign respectively.

### Statistical analysis

Statistical analysis was performed by using MS excel.

### Project designing

It was consented subjects about their eye blinking. Some of them told that they don't blink more and some said that they blink fast. Mostly tell that

*Institute of Molecular Biology and Biotechnology, Baha Uddin Zakariya University, Multan, Pakistan*

*Correspondence: Muhammad Tanveer, Institute of Molecular Biology and Biotechnology, Baha Uddin Zakariya University, Multan, Pakistan, Tel: +92 (61) 9210071, E-mail: tanveerqadir217@gmail.com*

*Received: 24 December 2018, Accepted: 16 January 2019, Published: 21 January 2019*



This open-access article is distributed under the terms of the Creative Commons Attribution Non-Commercial License (CC BY-NC) (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits reuse, distribution and reproduction of the article, provided that the original work is properly cited and the reuse is restricted to noncommercial purposes. For commercial reuse, contact [reprints@pulsus.com](mailto:reprints@pulsus.com)

their eye blinking is normal while in some subjects this is above than normal.

Total of 174 subjects participate in this study. The subjects were students in Baha Uddin Zakaria University Multan Pakistan.

**RESULTS AND DISCUSSION**

The connection of blood grouping with eye blinking is given in table From the Table 1 it is cleared that O+ blood group of male and female blink more while A- and AB- blink less. B+ have greater ratio those don't blink after them o+ have greater ratio that not blink more. Questionnaire based studies have given an important advancement in recent researches [3-10]. There is no previous research about connection of blood grouping with eye blinking.

**Table 1**  
**Blood grouping with eye blinking**

Blood group	Yes%	Yes%	Total	No%	No%	Total
	Male	Female	Yes%	Male	female	No%
A+	0.57	0.57	1.14	6.89	10.34	17.23
A-	0.00	0.00	0.00	0.57	0.57	1.14
B+	0.00	1.72	1.72	5.17	27.01	32.18
B-	0.57	0.00	0.57	0.57	1.72	2.29
AB+	0.57	1.14	1.71	1.14	3.44	4.58
AB-	0.00	0.00	0.00	0.00	0.57	0.57
O+	1.72	2.29	4.01	9.19	18.96	28.15
O-	0.00	1.72	1.72	0.00	4.02	4.02

**CONCLUSION**

It was concluded from the present study that O+ blink more while A- and AB- blink less.

**REFERENCES**

1. Qadir MI, Malik SA. Comparison of alterations in red blood cell count and alterations in hemoglobin concentration in patients suffering from rectal carcinoma undergoing 5-fluorouracil and folic acid therapy. *Pharmacologyonline*. 2010;3:240-243.
2. Qadir MI, Noor A. *Anemias rare & uncommon diseases*. Cambridge scholars publishing. Newcastle, England. 2018;978-1-5275-1807-0.
3. Millodot M. A review of research on the sensitivity of the cornea. *Ophthalmic and Physiological Optics*. 1984;4:305-18.
4. Qadir MI, Saleem A. Awareness about ischemic heart disease in university biotechnology students. *Glo Adv Res J Med Medical Sci*. 2018;7:059-61.
5. Qadir MI, Ishfaq S. Awareness about hypertension in biology students. *Int J Mod Pharma Res*. 2018;7:8-10.
6. Qadir MI, Mehwish. Awareness about psoriasis disease. *Int J Mod Pharma Res*. 2018;7:17-18.
7. Qadir MI, Shahzad R. Awareness about obesity in postgraduate students of biotechnology. *Int J Mod Pharma Res*. 2018;7:14-16.
8. Qadir MI, Rizvi M. Awareness about thalassemia in post graduate students. *MOJ Lymphology & Phlebology*. 2018;2:14-16.
9. Qadir MI, Ghalia BA. Awareness survey about colorectal cancer in students of M. Phil Biotechnology at Bahauddin Zakariya University, Multan, Pakistan. *Nov Appro in Can Study*. 2018;1:NACS.000514.
10. Qadir MI, Saba G. Awareness about intestinal cancer in university student. *Nov Appro in Can Study*. 2018;13:NACS.000515.