



Muhammad Imran Qadir and Muhammad Asad*

Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University, Multan, Pakistan

Received: 24 November, 2018

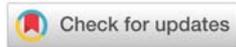
Accepted: 08 April, 2019

Published: 09 April, 2019

*Corresponding author: Muhammad Imran Qadir, Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University, Multan, Pakistan, E-mail: m.asadali2497@gmail.com

Keywords: Sweating in body; Blood group; Synergy

<https://www.peertechz.com>



Research Article

Synergy of blood grouping and body sweating

Abstract

Objective of the present study was to correlate blood grouping with “sweating in body”. ABO typing is the test to determine your blood group. In this test, you had to mix your blood with antibodies which were against the type of blood A and blood B. Blood typing is very important during pregnancy. When you had done the blood typing you have to see either Rh factor is present on the surface of your red blood cells or not. People with type A have anti B antibodies. And same in case of type B they have anti A antibodies. And there is a case of type O in which both type of antibodies i.e. A and B takes place. Total of 182 subjects participated in this study. The subjects were the students of Bahauddin Zakariya University Multan, Pakistan. ABO typing is the test to determine your blood group. In this test, you have to mix your blood with antibodies which are against the blood type A and blood type B. After this sample is check in sense that either blood cell is stick together or not. We took blood samples from 182 different subjects from their consent. These subjects were the students of Bahauddin Zakariya University Multan, Pakistan. It was concluded from the current study that B+ had maximum body sweating and AB- had minimum.

Introduction

KARL LANDSTEINER in 1901 first time discovered the ABO blood group system [1]. The classification of blood of human is based on those inherited properties of red blood cells which can be determined by the absence and presence of antigens i.e. A and B which are present on the surface of red cells. This is the reason a person may have chances of having blood of type A, B, O, or AB. The determination of blood group can be determined by the test known as “ABO TYPING”. ABO blood group system may present on platelets, epithelium and cells other than erythrocytes. Adverse immune response is caused by AB antigens in organ transplantation [1]. 45 are type O, 40 are type A, 0 are type B, 5 are type AB. Rh factor or Rhesus factor is protein which is inserted found on surface of red blood cells [2]. Presence of protein in blood shows you are Rh positive. Absence of protein in blood in blood shows you are Rh negative. Thus Rh test helps in determining whether Rh positive is present in individual’s blood or Rh negative [2]. Unlike the ABO blood group system, individuals who lack the D antigen do not naturally make it [1]. A person may have a Rh positive blood type and can still have an Rh negative gene for example if two parents have Rh positive blood types than their fetus will have Rh negative blood type(2). Actually Rh blood group systems have 50 antigens but it refers only to D antigen.

Perspiration is basically fluids secreted by sweat glands in the skin of mammals like humans. The sweating somehow got more formal attention in 17th century. Many scientists identified or discovered sweat gland pores in modern times. This is done

through English Microscopist NEHEMIA GREW who described sweat pores of hands and feet in 1684. Another scientist A.V. LEUVENHOEK also wrote about sweating and presence of sweat gland pores. Two types of sweat glands found in human body eccrine glands and apocrine glands. In humans, sweating is mainly to bring about the process of thermoregulation i.e. achieved by water rich secretion of eccrine glands. A maximum sweat rate for adult is about 2 to 4 liters per hour or 10 to 14 liters per day but it is less in children. It is possible to sweat too much. Some people have salty sweat. Actually sweat is a liquid mixture made up of 99% water and 1% salt and fat which is produced by sweat glands when person becomes overheated. Sweating is function of body that helps body in the release of salt based fluid from your sweat glands. It is also helpful in losing weight. The weight you are losing is water weight that occurs when you sweat. Excessive sweating is called hyperhidrosis which is warning sign thyroid problems. The good news you can listen is that most of the cases in which there is excessive sweating is harmless. Fat people sweat more than thin people.

Objective of the present study was to correlate blood grouping with “sweating in body”.

Materials and Methods

Method

ABO typing is the test to determine your blood group [1]. In this test, you had to mix your blood with antibodies which

were against the type of blood A and blood B. Then the sample is checked either blood cell is stick together or not. But if they stick together then there is case that it reacts with any type of blood group. Then the process of back typing takes place, in which blood type A or blood type B is mixed with the part of the blood which is liquid. And the same in case of type B they have anti A antibodies. And there is a case of type O in which both type of antibodies i.e. A and B takes place. This is the method by which His or She can determine its blood group. The typing of Rh is similar to the typing of ABO typing [1]. When blood typing is done you have to see either Rh factor present on the surface of your r.b.c or not then the results will have two cases first case is Rh positive if you have cell surface proteins [2]. Second case is that when you have no cell surface proteins then the result will be Rh negative. Blood typing is very important during pregnancy.

Project designing

We took blood samples from 182 different subjects from their consent. These subjects were the students of Bahauddin Zakariya University Multan, Pakistan.

Statistical analysis

Statistical analysis was performed by using MS-EXCEL.

Discussion and Results

Synergy of body sweating with blood group is given in table 1 ABO typing is a test for your blood group. In this test, your blood is mixed with antibodies against A and B blood type. Then the sample is checked or the blood cell is stick together or not. But if they stick together then there is a case that it reacts with any type of blood group. Then the process is going to take place, which is the type of blood that is in the blood. And they have anti A antibiotics. And there is a case of type O in which both type of antibodies, i.e. A and B takes place. This is

Table 1: Synergy of body sweating with blood group.

| BLOOD GROUP | YES % (MALE) | YES % (FEMALE) | TOTAL YES % | NO % (MALE) | NO % (FEMALE) | TOTAL NO % | TOTAL YES+NO % |
|-------------|--------------|----------------|-------------|-------------|---------------|------------|----------------|
| A+ | 7.14 | 10.98 | 18.12 | 0.00 | 2.74 | 2.74 | 20.86 |
| A- | 0.54 | 0.54 | 1.08 | 0.00 | 0.00 | 0.00 | 1.08 |
| B+ | 5.49 | 28.57 | 34.06 | 0.00 | 7.69 | 7.69 | 41.75 |
| B- | 1.09 | 2.19 | 3.28 | 0.00 | 0.00 | 0.00 | 3.28 |
| AB+ | 1.64 | 4.39 | 6.03 | 0.00 | 0.00 | 0.00 | 6.03 |
| AB- | 0.00 | 0.54 | 0.54 | 0.00 | 0.00 | 0.00 | 0.54 |
| O+ | 9.34 | 21.97 | 31.31 | 2.19 | 6.04 | 8.23 | 39.54 |
| O- | 0.00 | 5.49 | 5.49 | 0.00 | 1.64 | 1.64 | 7.13 |

the method by which you can determine your blood group. Rho typing uses ABO typing [1]. If you have cell surface proteins, what if you have an Rh factor? The second case is that when you have no cell surface protein, then the result will be Rh negative [2]. Blood typing is very important during pregnancy. Cross-matching, Rh-typing, ABO blood type [1], ABO blood type [1], A blood type, A blood type, A blood type.

Questionnaire based studies have given an important advancements in recent researches [3-10]. A scientist of Johannes Gutenberg University Mainz from Department of Neurology had already discussed on enhanced sweating in body in 2009 January 16 in which he said that a step by step approach is needed for the enhanced-sweating.

Conclusion

It was concluded from the current study that B+ had maximum body sweating and AB- had minimum.

References

1. Qadir MI, Malik SA (2010) 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* NI 3: 240-243. [Link: http://tinyurl.com/y593r37r](http://tinyurl.com/y593r37r)
2. Qadir MI, Noor A (2018) *Anemias. Rare & Uncommon Diseases*. Cambridge Scholars Publishing. Newcastle, England. ISBN: 978-1-5275-1807-0. [Link: http://tinyurl.com/y6naqsf5](http://tinyurl.com/y6naqsf5)
3. Qadir MI, Javid A (2018) Awareness about Crohn's Disease in biotechnology students. *Glo Adv Res J Med Medical Sci* 7: 062-064. [Link: http://tinyurl.com/yanh5mh3](http://tinyurl.com/yanh5mh3)
4. Qadir MI, Saleem A (2018) Awareness about ischemic heart disease in university biotechnology students. *Glo Adv Res J Med Medical Sci* 7: 059-061. [Link: http://tinyurl.com/y7vuo97l](http://tinyurl.com/y7vuo97l)
5. Qadir MI, Ishfaq S (2018) Awareness about hypertension in biology students. *Int J Mod Pharma Res* 7: 08-10.
6. Qadir MI, Mehwish (2018) Awareness about psoriasis disease. *Int J Mod Pharma Res*, 7: 17-18.
7. Qadir MI, Shahzad R (2018) Awareness about obesity in postgraduate students of biotechnology. *Int J Mod Pharma Res* 7: 14-16.
8. Qadir MI, Rizvi M (2018) Awareness about thalassemia in post graduate students. *MOJ Lymphology&Phlebology* 2: 163-165. [Link: http://tinyurl.com/y22umw4l](http://tinyurl.com/y22umw4l)
9. Qadir MI, Ghalia BA (2018) Awareness survey about colorectal cancer in students of M. Phil Biotechnology at Bahauddin Zakariya University, Multan, Pakistan. *Nov Appro in Can Study* 1: NACS.000514.2018. [Link: http://tinyurl.com/yygux6ry](http://tinyurl.com/yygux6ry)
10. Qadir MI, Saba G (2018) Awareness about intestinal cancer in university student. *Nov Appro in Can Study* 1: NACS.000515.2018. [Link: http://tinyurl.com/y58zeocw](http://tinyurl.com/y58zeocw)