

## СЕКЦИЯ ИНОСТРАННЫХ ЯЗЫКОВ

# RELATIONSHIP OF BLOOD GROUP WITH CARDIOVASCULAR DISEASE AS ATHEROSCLEROSIS

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**Relevance:** The disease affects most of the population, traces of atherosclerotic deposits can be found inside the vessels since adolescence. In addition, the course of the disease can go through periods of exacerbation when there is a rupture of the atherosclerotic plaque or a complete closure of the vessel which will lead to various adverse complications, up to a fatal outcome [1]. To date, atherosclerosis does not have a single theory of its origin, which allows us to consider various hypotheses, including its relationship with the blood group.

**Objectives:** To find out a relationship between cardiovascular diseases, namely atherosclerosis and blood groups. This can play an important role in the development of personalized medicine, i.e. predicting the risk of developing atherosclerosis without using a combination of biochemical studies of serum lipids, as well as anthropometric examination which helps to suggest the development of the disease.

**Materials and Methods:** A retrospective study was conducted using medical case histories. At the same time, a comparative analysis was carried out taking into account the two main classifications of human blood groups — the ABO system and the Rh system. This method does not take into account the possibility of a genetic predisposition to the presence of other diseases (arterial hypertension, diabetes mellitus), the results of biochemical and anthropometric studies. Depending on the above parameters, 92 medical records were studied, divided into the following indicators: indicator 1- positive Rh factor in blood groups 1,2,3,4. indicator 2 — negative Rh factor in blood groups 1,2,3,4.

**Results:** The incidence of atherosclerosis was the following: in patients with a positive Rh factor and blood group 1 it was 22.9%, with group 2–25%, with group 3–25% and with group 4–12.39%. In patients with a negative Rh factor and group 1 it was 2.1%, with group 2–2.17%, with group 3–5.44% and with group 4–5%.

**Conclusion:** Thus, the results obtained indicate that there is a possible relationship between the blood group and atherosclerosis, other probable affecting factors were not studied.

### References

1. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5691790>