



**Figure 1 – Relationship between severity of acne and Acne-QoL domains**

### **Conclusions**

Our study showed significant impairment of QoL in acne patients. Acne negatively affects quality of life, and the impact is proportional to the severity of acne. Worsening of QoL was observed with longer duration of disease, increase in severity of acne. More severe acne is associated with greater effect on quality of life with implications for self-esteem, body image and relationships with others. This study thus stresses the importance of assurance and counseling along with early treatment of acne vulgaris in reducing disease-related psychosocial sequelae and enhancing the efficacy of treatment. Therefore, Dermatologists should be encouraged to add Quality of Life evaluations for individuals with acne, since these might reveal individual traits and impairments and help intervene with more individual specific interventions.

### **LITERATURE**

1. Grekin, S. K. A Four-question Approach to Determining the Impact of Acne Treatment on Quality of Life / S. K. Grekin, P. Saitta // J Clin Aesthet Dermatol. – 2012. – № 5(3). – P. 51–57.
2. The impact of acne vulgaris on quality of life and psychic health in young adolescents in Greece. Results of a population survey / E. Tasoula [et al.] // An Bras Dermatol. – 2012. – № 87(6). – P. 862–869.
3. Hazarika, N. Assessment of Life Quality Index Among Patients with Acne Vulgaris in a Suburban Population / N. Hazarika, R. K. Rajaprabha // Indian J Dermatol. – 2016. – № 61(2) – P. 163–168.
4. Acne-specific quality of life questionnaire (Acne-QoL): translation, cultural adaptation and validation into Brazilian-Portuguese language / C. D. E. S. Kamamoto [et al.] // An Bras Dermatol. – 2014 – № 89(1) – P. 83–90.

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## **THE ROLE OF HEREDITARY FACTORS IN THE DEVELOPMENT OF CERTAIN DISEASES**

### **Introduction**

Parents, grandparents and children usually share the same health problems. If there is a certain disease that runs in the family. Inherited risk factors are passed down from parent to child by

way of genes. All humans have the same genes, but different people have slightly different versions of these genes.

Cardiovascular disease (CVD) is a general term for conditions affecting the heart or blood vessels. It's usually associated with a buildup of fatty deposits inside the arteries (atherosclerosis) and an increased risk of blood clots. The main cause of death is due heart attack and stroke [1, 2].

The most common behavioural risk factors of heart disease and stroke are unhealthy diet, lack of physical activity, tobacco and use of alcohol. These factors cause the individual to develop increased blood pressure, increased blood glucose and obesity. Some of patient have genetic predisposition for CVD. Most common symptoms that patients suffer from are chest pain, weakness or numbness of leg and arms, breathlessness, palpitations, lightheaded, fatigue and swollen limbs [1, 2].

Because most common diseases, including cardiovascular diseases, involve more than one gene, inheritance patterns are varied and complex. If one parent has a disease, it does not necessarily mean that the child will develop the same disease. The realization of genetic predisposition in many cases depends on the patient's lifestyle and environmental factors. Prevention of CVD includes by maintaining a healthy diet, physical activity, restriction of alcohol and tobacco consumptions [1].

### **Goal**

This study aims to measure the prevalence of disease in patients who have family history of cardiovascular diseases.

### **Material and Methods of research**

Retrospective analysis of the 760 case histories of patients who visited Gomel city polyclinic No. 2 was done. This descriptive-analytic study was conducted on patients of age group from 25 years – 65 years who have visited the said polyclinic. We determined whether patients had CVDs, diabetes and whether their parents had the same conditions.

For comparison of qualitative characteristics, the  $\chi^2$  criterion with Yates correction was used. Differences were considered reliable at a statistical significance level of 95% ( $p < 0.05$ ).

### **The results of the research and their discussion**

In 63 patients, there was a hereditary predisposition to CVD or diabetes (father, mother, or both parents had the same disease).

Table 1 – Prevalence of Inherited diseases

Diseases	No. of patients	Hereditary	Inherited from		
			Mother	Father	Both
Arterial hypertension	503	10	3	5	2
Diabetes	124	44	10	15	19
Atherosclerosis	12	0	0	0	0
Ischemic Heart Disease	122	7	3	3	1
Myocardial infarction	1	0	0	0	0
Stroke	19	2	1	1	0

Among the examined patients 503 patients were diagnosed with arterial hypertension, 10 of them had hypertension in their parents (3 – in mother, 5 – in father and 2 – in both parents). Thus, hereditary predisposition to arterial hypertension was observed in 2.0% of patients with arterial hypertension.

Among the examined patients 12 patients were diagnosed with atherosclerosis, among which no patients had parents with atherosclerosis. Thus, hereditary predisposition to atherosclerosis was not found.

Among the examined patients 122 patients were diagnosed with ischemic heart disease, 7 of them had ischemic heart disease in their parents (3 – in mother, 3 – in father and 1 – in both parents). Thus, hereditary predisposition to ischemic heart disease was observed in 5,73% of patients with ischemic heart disease.

Among the examined patients 19 patients were diagnosed with stroke in anamnesis, 2 of them had stroke in their parents (1 – in mother, 1 – in father and 0 – in both parents). Thus, hereditary predisposition to stroke was observed in 10,50% of patients who suffered stroke.

Among the examined patients 1 patient was diagnosed with myocardial infarction, who did not have myocardial infarction in both their parents.

Among the examined patients 124 patients were diagnosed with diabetes, 44 of them had diabetes in their parents (10 – in mother, 15 – in father and 19 – in both parents). Thus, hereditary predisposition to diabetes was observed in 35.48% of patients with diabetes.

Thus, hereditary predisposition to type 2 diabetes mellitus was detected statistically significantly more often than to cardiovascular pathology, in particular to arterial hypertension ( $p < 0.001$ )

### ***Conclusions***

According to the results of the study, the most common disease with hereditary predisposition is diabetes with 35.48%. We could not find hereditary predisposition for cardiovascular diseases.

### **LITERATURE**

1. National health service. Cardiovascular disease / National health]. – Access mode: <https://www.nhs.uk/conditions/cardiovascular-disease/> –Date of access: 02.03.2024.
2. British heart foundation. Cardiovascular heart disease / British heart foundation // [Electronic resource]. – Access mode: <https://www.bhf.org.uk/information-support/conditions/cardiovascular-heart-disease> – Date of access: 02.03.2024.