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Prevalence of Chronic Venous Disease in primary care centers in Azerbaijan: the VEINSCOPE study

Abstract

Aim: CVD is a chronic disorder that substantially changes the quality of life for the patient since the first symptomatic stages. The effect of CVD in the general population is often undervalued and not well detected by health systems. The aim of this study was to update the information on the prevalence of CVD and its stages in accordance with CEAP classification and evaluate the treatment status of CVD patients and the tactics and steps of GPs undertaken in order to manage these patients.

Material and Methods: This cross-sectional multicenter study was performed in primary care centers in which sequential patients searching medical help, regardless of reason, were enrolled. The study included 3249 patients. Data were collected by the use of a questionnaire and clinical examination.

Results: The prevalence of CVD (CEAP categories C0s–C6) was 48.5%. Only 26.9% of the patients had advised with their physicians because of their venous problems in the lower extremities. 30.8% of the patients had received either oral treatment or combination of oral and topical treatments for the given symptoms. Only 5.4% of the cases were redirected to the specialist.

Conclusion: Chronic venous disease is extremely prevalent among patients examined at primary care clinics in Azerbaijan particularly in women and elderly patients. Redirection to a specialist is uncommon.

Keywords: Chronic venous disease, phlebology, varicose vein

INTRODUCTION

Chronic venous disease (CVD) contains a spread of clinical manifestations ranging from uncomplicated telangiectasis and varicose veins to venous ulceration (1). Symptoms emerge early in the developing of the disease and with time can be related with clinical signs of increasing severity. CVD is a chronic disorder that substantially changes the quality of life for the patient since the first symptomatic stages.

The effect of CVD in the general population is often undervalued and not well detected by health systems (2). It is also frequently missed in primary care and cardiovascular care because of an underestimation of its scale and of the influence of the disease. Therefore, patients queries about leg symptoms can be the best way to bring out CVD and the first stage of a more in-depth study (3).

The Aim

Update the information on the prevalence of CVD and its stages in accordance with Clinical, Etiology, Anatomical, Pathophysiological (CEAP) classification.

Evaluate the treatment status of CVD patients and the tactics and steps of General Practitioner (GPs) undertaken in order to manage these patients.

MATERIAL AND METHODS

We did this cross-sectional multicenter study in primary care centers in which sequential patients searching medical help, regardless of reason, were enrolled. The study was performed in June to September 2019 and included 3249 patients.

The researchers were general practitioners (GPs) chosen in a randomly way, and the aim of this study was to collect data about

CVD existence, demographic data, frequency of disease's signs and symptoms, related risk factors, therapeutic management practice.

Questionnaires were used for data collection. CVD stages were assessed based on symptoms detected through questioning and physical assessment eventually defining the stage of CVD applying CEAP classification.

Statistical methods

Collected data were introduced in excel file and consequently analyzed using SPSS.

RESULTS

The prevalence of CVD (CEAP categories C0s–C6) was 48.5% (n=1576), significantly higher in women (74.81%), than in men (25.19%). The bigger the age the higher the prevalence and the more severe the CVD (Figure 1).

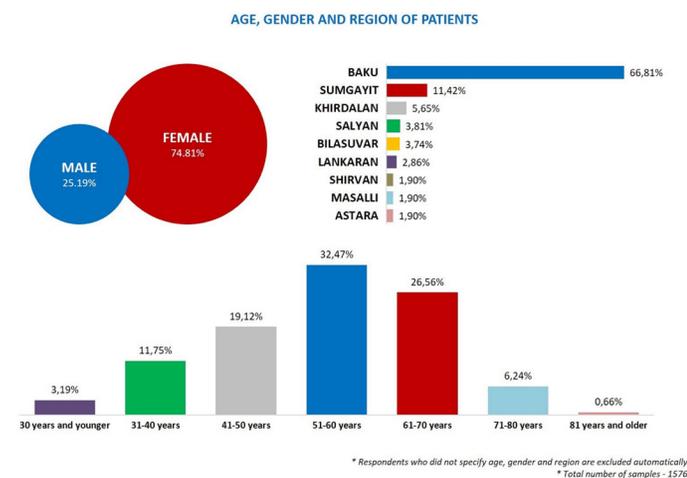


Figure 1. Age, gender and region of patients

26.9 % of the patients (n=424) had advised with their physicians because of their venous problems in the lower extremities. In rest of the cases reason for searching GP consultation was various complaints. (Figure 2).

The most frequent symptoms in the common sample were the sensation of heavy legs (77%), leg pain (65%) and swelling (55%) (Figure 3).

98.3 % of the patients mentioned they had experienced at least one CVD symptom. 81,28% had 3 and more CVD symptom.

The allocation of the patients in conformity with the categories of the CEAP classification is presented in Figure 4.

Recommendations and treatment was provided in all symptomatic patients by GPs. It was decided to sent only 5.4 % of all the patients to specialists. In 976 (62.7%) of the patients included, it was decided necessary to start the treatment. Treatment options recommended by GPs is presented in Figure 5.

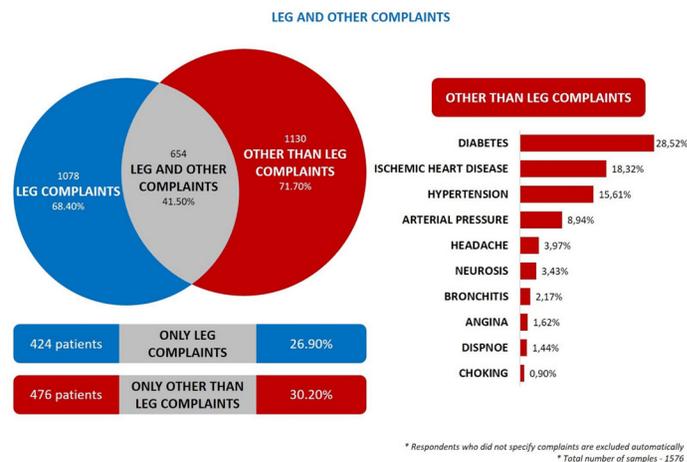


Figure 2. Leg and other complaints

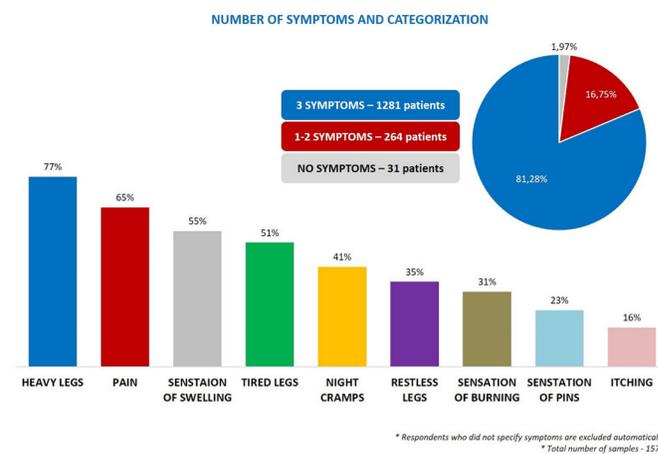


Figure 3. Number of symptoms and categorization

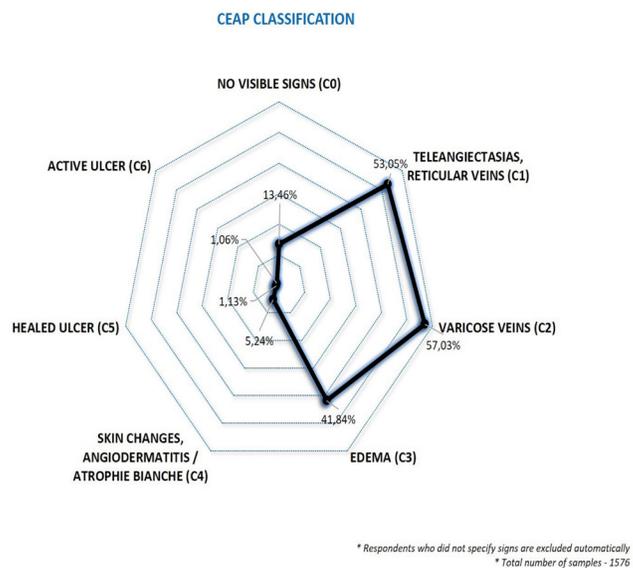


Figure 4. CEAP classification

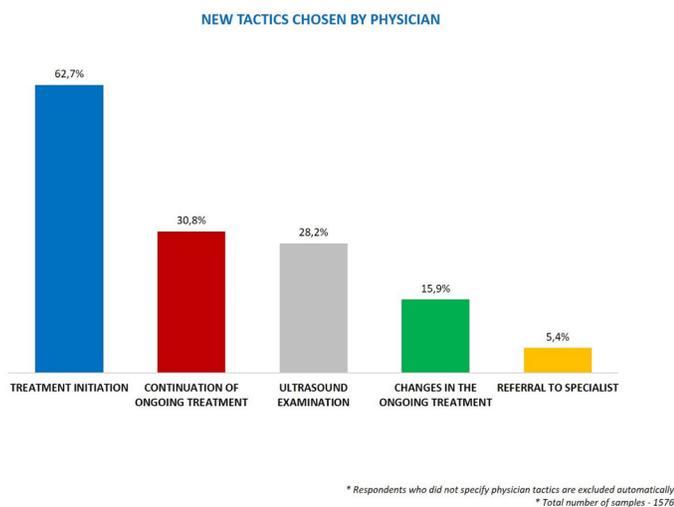


Figure 5. New tactics chosen by physician

DISCUSSION

It was the first study regarding prevalence of venous disorders in Azerbaijan and the prevalence is high. Our research took place in 2019 and the reported CVD rate was 48.5 %. The high rate also reported in industrialized countries such as France (4), Russia (5), the United States (6), Switzerland (7), Italy (8), England (9). Our data of the prevalence rate can be overestimated, because of the fact that some of the symptoms such as sensation of heavy legs, restless legs or night cramps can be caused also by other diseases than CVD and often, it is difficult to make a difference, between CVD C0s stage and other diseases, especially in a polyclinic, where it is mostly not possible to perform additional examinations such as duplex ultrasound. The second point is that only 26.9 % of the patients had consulted with their physicians due to their venous problems in the lower extremities. Those data reveal the fact that patients are ignoring CVD-related symptoms, while physicians are overlooking them. It makes early CVD diagnosis and performance of adequate therapeutic management not to be applied in early disease stages. A same conclusion regarding adequate detecting and additional training for physicians was achieved by the Vein Consult Program (1). An important aspect is the low percentage of patients referred to a venous specialist. It was considered necessary to refer only 5.4 % of all the patients to specialists. The reason might be the low availability of venous specialists in certain regions, or the fact that GPs don't consider chronic venous disease so serious. A similar conclusion regarding variations in GPs referral was reported also by other studies, however this point cannot be explained easily (10).

CONCLUSION

Chronic venous disease is extremely prevalent among patients examined at primary care clinics in Azerbaijan particularly in women and elderly patients. Redirection to a specialist is uncommon.

Conflict of Interests: The author declares that there are no conflict of interests.

Financial Disclosure: There are no financial supports.

Data Availability Statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

Ethics committee approval: The study complied with the Declaration of Helsinki, was approved by the Baku Phlebology Center and was conducted according to the protocol and using minimal invasive surgical techniques.

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