LOWER LIMB VARICOSE VEINS AS PROFESSIONAL DISEASE FOR CATERING STAFF

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Abstract
Varicose veins are permanent and irregular dilatations of the veins. Although in principle any vein can become varicose, in practice, varicose veins are usually located in the distal half of the body, especially in the legs, affecting subcutaneous veins. Standing is a contributing factor in the appearance of varicose veins. Through this study, the main objective was to identify working in catering as a risk factor for varicose legs (and their complications) as a professional disease.

Key words: **varicose veins, risk, catering, venous thrombosis**

INTRODUCTION

The varicose vein is a disease more common in women, 60% of them show signs of disease at ages between 20 and 50 years.

Like any disease, varicose veins are favored by environmental factors or related to our lifestyle: a profession that requires prolonged standing (teachers, salesmen, barbers, dentists, etc.), intense and prolonged muscular effort (weightlifters), or vibrations, excessive heat and humidity, obesity - besides the extra weight on the leg press, the neuro-endocrine and metabolic disorders that involve vein wall damage, pregnancy by increasing intra-abdominal pressure, genetic factor is present in over 80% of cases.

MATERIALS AND METHODS

The study retrospectively surveyed a total of 823 cases diagnosed with varicose veins and 145 patients diagnosed with venous thrombosis, hospitalized on the surgical departments of Emergency Clinical Hospital Oradea.

The extended research period is five years (2005-2009).

For the study, there was used the archive of the Emergency Clinical Hospital Oradea, and also the computerized database of the unit.

There was used the historical data and identification of patients in the observation sheets.

The research method used was the statistical study, which included: determination of the ratio OR **rates (with a 95% confidence interval), hi square test, Fisher's test.**

RESULTS AND DISCUSSIONS

Between the years of 2005-2009, there were 823 cases diagnosed with varicose veins of the lower limbs, in the Emergency Clinical Hospital Oradea.

In general patients were seeking treatment for varicose veins for following reasons: problems of aesthetics; functional disorders; the occurrence of chronic edema; emergence of trophic disorders because of venous insufficiency.

Evaluation of cases in terms of living and working conditions indicates that almost one third of people taken out worked in catering (waiters, chefs, bartenders, etc.) (fig.1 and fig.2).

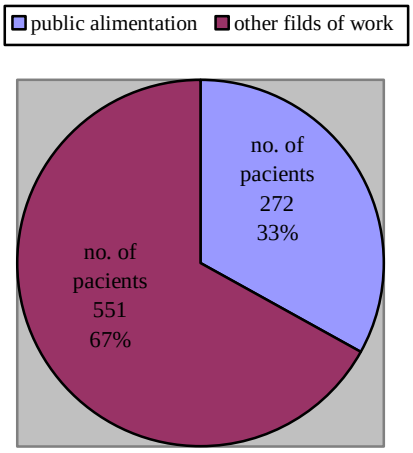

Fig.1. Patients' work field

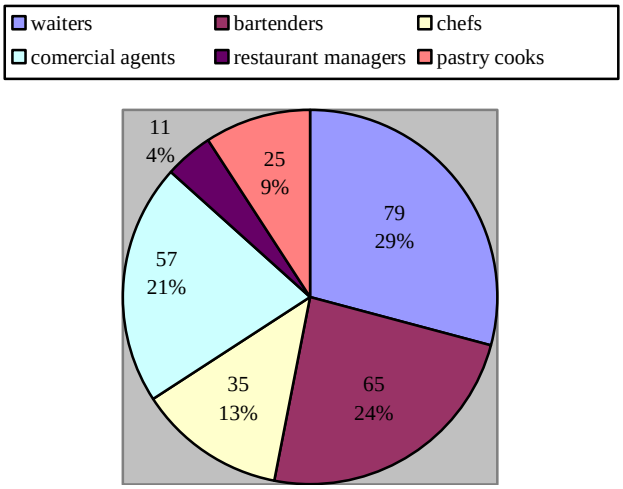

Fig. 2. Patients jobs

Before prescribing a treatment for varicose veins, it was required a careful exploration of each case; after finding abnormalities in the venous system of lower limbs, was selected the most effective therapeutic method.

Being considered the elective treatment in eliminating the pathological fund and in decreasing the recurrence, surgical treatment was adopted in 91% of cases (749 cases). Of the 749 operated patients with varicose veins, 202 of them state that they have worked in catering.

During those five years, there were diagnosed 145 cases of venous thrombosis, of which 94 patients had a history of interventions for varicose veins of the lower limb.

Reporting interventions complicated with venous thrombosis to the total number of interventions, allows determining the risk of venous thrombosis based on pathology/surgery. (Table 1.)

Table 1.

Reporting venous thrombosis to surgical interventions

Nr. crt.	Pathology	No. total	No. venous thrombosis	Ratio
1.	Surgically treated varicose veins	749	94	1:29
2	All surgical interventions	33438	145	1:230

Venous thrombosis risk of a patient undergoing an operation in the field of general surgery coincides with the overall surgical risk of developing such a complication.

A person with varicose lower limb has a risk for venous thrombosis eight times higher than the general surgical risk. (Highly significant - $p<0.001$).

Of all patients who underwent surgery for varicose veins, 202 patients have worked or work in catering, and of these 45 suffered complications such as venous thrombosis. (fig. 3 and Table 2.)

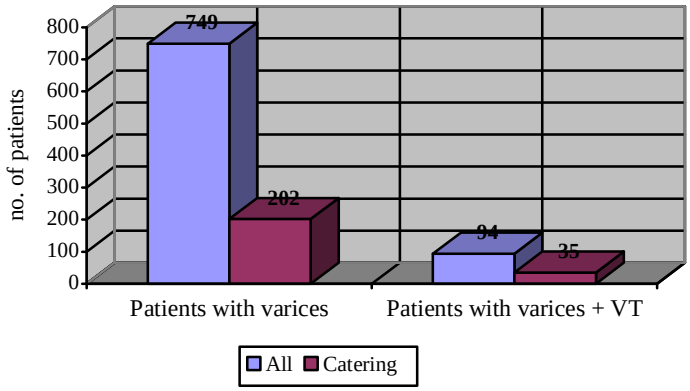

Fig. 3. Distribution of patients according to complications and job

Table 2.

Statistical determination of venous thrombosis risk in patients working in catering

Indices	χ^2	p	Odds Ratio	Confidence interval 95%	
				Inferior limit	Superior limit
Catering/ other job	2.3	0.14	1.38	0.9089	2.0971

According to statistical calculations ($p>0.05$), there isn't a greater risk of people with varicose veins of the legs that have worked in catering to complications of venous thrombosis compared with other patients who underwent surgery for varicose veins of the legs.

CONCLUSIONS

Work in the catering sector (which requires a prolonged standing) is a risk factor for varicose veins in the legs.

Patients undergoing surgery for varicose veins of the legs, are eight times higher risk of developing venous thrombosis, compared with the risk of general surgery.

There is no statistical correlation between the activity in catering and the risk of venous thrombosis.

REFERENCES:

1. Andercou A.I., O.A., Andercou, 2006, Flebolimfologie practică. Editura Imprimeriei de Vest, Oradea.
2. Bucur Gh., 2003, Flebologie practică medicală şi dermatologică, Vol I, Varicele simple, Ed. Info Medica
3. Deitelzweig S, MR. Jaff, 2004, Medical management of venous thromboembolic disease. Tech Vasc Interv Radiol; 7(2):63-7. [Medline].
4. Fowkes F.J.I., J.F. Price, F.G.R. Fowkes, 2002, Incidence of Diagnosed Deep Vein Thrombosis in the General Population: Systematic Review, Wolfson Unit for Prevention of Peripheral Vascular Diseases, Public Health Sciences, University of Edinburgh, Teviot Place, Edinburgh, EH8 9AG, Scotland
5. Hansen J., B. Koeppen, 2002, Netter's atlas of physiology. Elsevier
6. James W., T. Berger, D.M. Elston, 2006, Andrews Diseases of the Skin, Clinical Dermatology, Ed. Elsevier Health Sciences
7. Ouriel K., R.M. Green, R.K. Greenberg, D.G. Clair, 2000, The anatomy of deep venous thrombosis of the lower extremity, Annual Meeting of the Midwestern Vascular Surgical Society, Journal of Vascular Surgery, Volume 31, Issue 5, May, Chicago, p. 895-900
8. Palade R.Ş., 2008, Manualul de chirurgie generală, Ediţia a doua, Editura ALL: Bucureşti
9. Perrin M., 1997, Phlebology, 50-699.
10. Tournay R., 1985, Phlebologie, 38:9-563.