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ORIGINAL ARTICLE

Exploring the Incidence and Contributing Factors of Varicose Veins in a Given Population

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ABSTRACT:
Background: Varicose veins are a prevalent, long-lasting venous condition that impacts a substantial portion of the global adult population, ranging from 20% to 40%. This study was undertaken to investigate the prevalence of varicose veins and identify the factors contributing to their development within a specific population. **Methods:** In this cross-sectional study, our aim was to examine the occurrence and potential contributors to varicose veins within a specific population. For the purpose of this investigation, varicose veins were characterized as dilated, winding subcutaneous veins that are either visible or detectable by touch when the patient is in a standing position**. Results**: Our study revealed a substantial prevalence of varicose veins within the population, with a prevalence rate of 70.22%. Among the patients, the primary risk factor for varicose veins was aging, accounting for 30.96% of cases, closely followed by prolonged standing, which contributed to 24.05% of the occurrences**. Conclusion**: The current study has drawn the conclusion that advancing age and extended periods of standing represent significant risk factors for the development of varicose veins.
Keywords: varicose veins, sub- cutaneous veins, risk Factors

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INTRODUCTION

Varicose veins are characterized by the enlargement, visibility, and contorted appearance of veins, primarily occurring in areas of the body where the venous return to the heart is compromised. However, they are most frequently observed in the lower limbs. This venous disorder is a prevalent issue, affecting around one-third of the population in Great Britain and serving as a significant contributor to morbidity[1].
Varicose veins (VV) represent a chronic venous condition primarily affecting the lower limbs. These veins undergo dilation, typically ranging from 2 to 4 millimeters in diameter[2,3]. Varicose veins manifest in various forms, including reticular, telangiectasia, and trunk veins[4]. This condition can result in a range of distressing symptoms, such as throbbing sensations, swelling, aching, nocturnal cramps, and leg fatigue[4,5]. The high prevalence of varicose veins and associated complications has emerged as a significant challenge in the 21st century, contributing to increased disability rates and a rise in the cost of treatment[6].The estimated prevalence of varicose veins is notably wide-ranging, spanning from 4% to 50% in men and 1% to 72% in women. These variations stem from differences in population demographics, including age, race, and gender, as well as variations in measurement methods and disease definitions[7]. Among various conditions, varicose veins in the lower extremities stand out as the most common, imposing significant societal costs[7]. The primary objective of the current study was to investigate the prevalence of varicose veins in a specific population and identify associated risk factors.

MATERIALS AND METHODS

This cross-sectional study was conducted to evaluate the prevalence and risk factors associated with Varicose Veins in a diverse adult population, encompassing both males and females aged 20 years and above. Prior to the commencement of the study, comprehensive information about the study was provided to all potential participants, and their written informed consent was obtained. The study included a total of 500 participants[8]. Individuals were excluded from the study if they met any of the following criteria: (a) had undergone surgeries or received anesthesia within the last 6 months, (b) had neurological conditions, (c) were currently pregnant or had been pregnant within the past year, and (d) had a documented history of varicose veins.In this study, varicose veins were specifically defined as veins that were visibly enlarged, twisted, and located beneath the skin's surface, detectable either through visual observation or palpation while the patient was in a standing position. The data collection process focused on identifying the presence or absence of varicose veins in the participants. It's important to note that no ultrasound examinations were conducted as part of the data collection procedure. The collected data was

subsequently analyzed using SPSS version 21 for statistical analysis and interpretation.

RESULTS

The study revealed a notably high prevalence of varicose veins within the population, with a prevalence rate of 70.22%. Among the participants, the primary risk factor for the development of varicose veins was aging, accounting for 30.96% of cases, followed closely by prolonged standing, which contributed to 24.35% of occurrences.

Table 1: Prevalence of varicose veins

Varicose veins	N (%)
Present	340(72.22%)
Absent	160(27.77%)
Total	500(%)

Table 2: Risk factors for varicose veins

Risk factors	Presence of varicose veins N(%)
Age	100(30.56%)
Family history of varicose veins in first-degree relatives	65(11.73%)
History of thromboembolic disease	20(5.89%)
Prolonged standing	90(24.35%)
Unskilled work	40(12.05%)
Exercise less than once a week	30(8.71%)
Obesity	20(6.66%)

DISCUSSION

Varicose veins can exhibit a range of presentations in individuals. Some may experience no noticeable symptoms, while others may encounter mild discomfort. However, for certain individuals, varicose veins can cause pain or itching, significantly impacting their overall quality of life. It's important to note that varicose veins may progress in severity over time and potentially lead to complications, including skin discoloration, eczema, superficial thrombophlebitis, bleeding, loss of subcutaneous tissue, lipodermatosclerosis, or even the development of venous ulcer[9].Numerous risk factors are associated with the development of varicose veins, including age, gender, family history, obesity, dietary habits, and occupations that involve prolonged periods of standing. Currently, the prevalence of varicose veins is higher among women compared to men, as reported in previous studies[10].

In the context of our present study, we observed a substantial prevalence of varicose veins in the population, with a rate of 70.22%. Among the participants, the most prominent risk factor for varicose veins was found to be advancing age, contributing to 30.76% of cases, followed closely by prolonged periods of standing, which accounted for 24.35% of occurrences.

Our study identified a noteworthy association between a family history of varicose veins among first-degree relatives and an increased risk of developing varicose veins. This finding is particularly significant because it relies on self-reported information provided by the subjects, which aligns with and supports earlier research conducted through clinical examinations of relatives. This consistency in results reinforces the role of genetic predisposition as a substantial risk factor for varicose veins.

CONCLUSION

The current study's key conclusion is that advancing age and extended periods of standing represent notable risk factors for the development of varicose veins.

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