

VASCULAR DISEASE, VASCULITIS

## POPULATION-BASED EPIDEMIOLOGIC STUDY IN VENOUS DISEASES IN GERMANY: PREVALENCE, COMORBIDITY, AND MEDICAL NEEDS IN A COHORT OF 19,104 WORKERS

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Background: Chronic venous insufficiency (CVI) is a frequent condition in general population. The current study contains representative data from the general working population on 25 companies all over Germany.

Objectives: To determine the prevalence of CVI in working population in Germany.

Materials and Methods: We performed a population-based observational study based on clinical examinations from 2006-2015, personal history and technical examinations. All exams were conducted by well-trained phlebologists who additionally underwent a specific training before starting the exams. A large series of clinical and patient reported outcomes measures were assessed and categorized. Descriptive data analysis was done to determine CVI prevalence and occurrence of potential risk factors. As a second step nonparametric tests were conducted to evaluate how people with and without CVI differ concerning age and BMI and Chi<sup>2</sup> tests to estimate the influence of risk factors on CVI prevalence. Logistic regression analysis, controlling for age, gender and BMI was performed.

Results: In total 19 104 employees from different branches were included. The majority of the examined persons were doing office work (10 165; 80 %). Among the 4 038 persons with at least one CVI related diagnosis, 68.3 % (2 757) had a need for treatment. The multivariate analysis showed that age and BMI were significantly higher in participants with CVI. In the regression model and CVI as dependent variable age, BMI and gender were found to be significant predictors. In case of gender, being female was found to be protective with an odds ratio (OR) = 0.66 (95 % CI 0.59 – 0.73).

Conclusions: There is clear indication for active venous treatment in 22.3 % of the adult working population. Guideline-compliant early treatment of such conditions related with chronic venous disease can reduce the risk of escalation and contribute to improvements in quality of life.