Which Patients Having Asymptomatic Carotid Artery Stenosis Might Benefit From Screening?

To the Editor:

We read with interest the article by de Weerd et al, published in the June issue of Stroke.1 The authors have performed an individual patient data meta-analysis from 4 population-based studies with the aim to estimate the prevalence of asymptomatic carotid artery stenosis (ACAS). They have found that the prevalence of moderate carotid stenosis (≥50%) ranges from 0% to 7.5% and the prevalence of severe carotid stenosis (≥70%) from 0% to 3.1%. The severe ACAS prevalence is increased with increasing age and is slightly higher in men. As would be expected, the prevalence rate of severe carotid stenosis is higher in patients with vascular risk factors. A population-based epidemiological study has shown that ACAS is more prevalent in a subgroup of subjects having multiple, ≥3, modifiable vascular risk factors than among the general population aged 50 to 79 years.2 In addition, it should also be taken into account that geographic variations in the distribution of the vascular risk factors exist,3 which could influence the ACAS prevalence.

Undoubtedly, the authors’ findings are important for the discussion on the cost-effectiveness of screening the general population for ACAS. In conclusion, they have pointed out the need for selecting high-risk patients who might benefit from screening. Some aspects of this still debatable issue have been discussed in a longitudinal population-based study. Significant relations between ACAS and coronary heart disease, peripheral arterial disease, and cigarette smoking in men have been observed.4 A previous study has also reported that male smokers with peripheral arterial disease have a particularly high ACAS prevalence rate.5

Obviously, patients with vascular disease and multiple risk factors have a higher probability of having ACAS.

The available data suggest that the screening for ACAS might be feasible and cost-effective for subjects with coronary heart disease or peripheral arterial disease, especially smokers. However, additional studies are probably needed to clarify the geographic and race–ethnic differences in the distribution patterns of vascular risk factors related to ACAS.

Disclosures

None.

Dimitar Ivanov Hadjiiev, MD, PhD, DMSc
Medical University
Sofia, Bulgaria

Petya Pencheva Mineva, MD, PhD
Thracian University
Stara Zagora, Bulgaria


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Dimiter Ivanov Hadjiev and Petya Pencheva Mineva

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