Hypertension

# Prevalence and Risk Factors for Secondary Hypertension in Young Adults

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## Abstract

### BACKGROUND:

The prevalence of secondary causes of hypertension in young adults is unknown, and therefore, there is no consensus about the indication of screening of secondary hypertension (2HTN) in this population. The objective was to report the prevalence and the causes of 2HTN in young subjects.

### METHODS:

In this cross-sectional study, 2090 patients with confirmed hypertension aged 18 to 40 years with full workup for 2HTN screening were included. We assessed the prevalence of 2HTN and analyzed the factors associated.

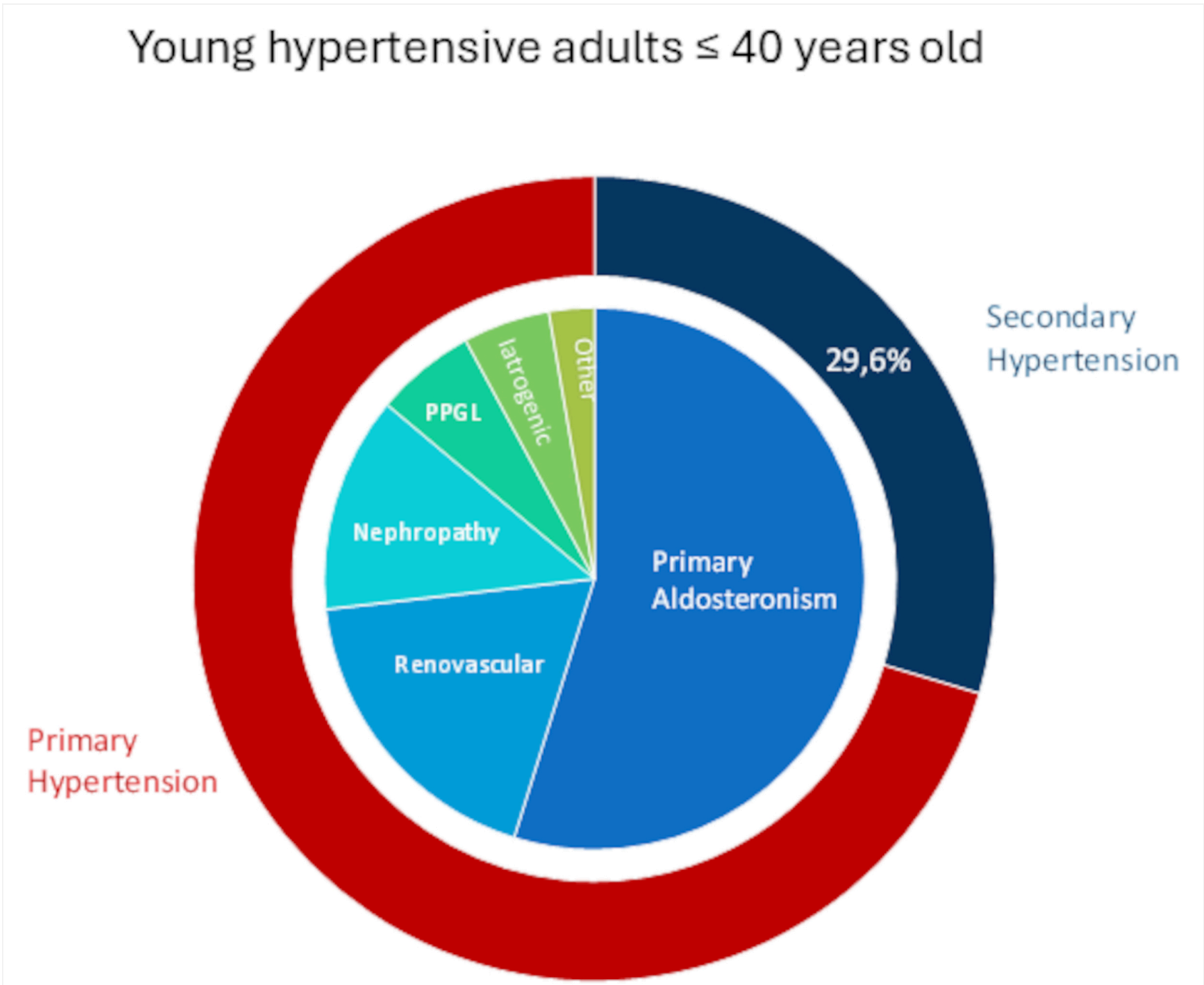
### RESULTS:

Among 2090 patients, 619 (29.6%) had a 2HTN. The most frequent diagnoses of 2HTN in descending order were primary aldosteronism (n=339; 54.8%), renovascular hypertension (n=114; 18.4%), primary kidney disease (n=80; 12.9%), pheochromocytoma/functional paraganglioma (n=37; 5.9%), hypertension caused by drugs or substances (n=32; 6.0%), and other diagnoses (n=17; 2.7%). Patients with blood pressure <160/100 mm Hg did not have a lower prevalence of 2HTN regardless of the number of treatments. The prevalence of 2HTN was higher in the decade between 30 and 40 years of age than between 18 and 30 years of age ($P$=0.024). Female sex, hypokalemia, treatment with at least 2 medications, no familial history of hypertension, body mass index <25 kg/m$^2$, and diabetes were associated with a higher prevalence of 2HTN.

### CONCLUSIONS:

The prevalence of 2HTN is high among young patients with hypertension (29.6% in our cohort), regardless of age and blood pressure level. All patients with hypertension under 40 years of age should be screened for secondary causes.

## Graphical Abstract

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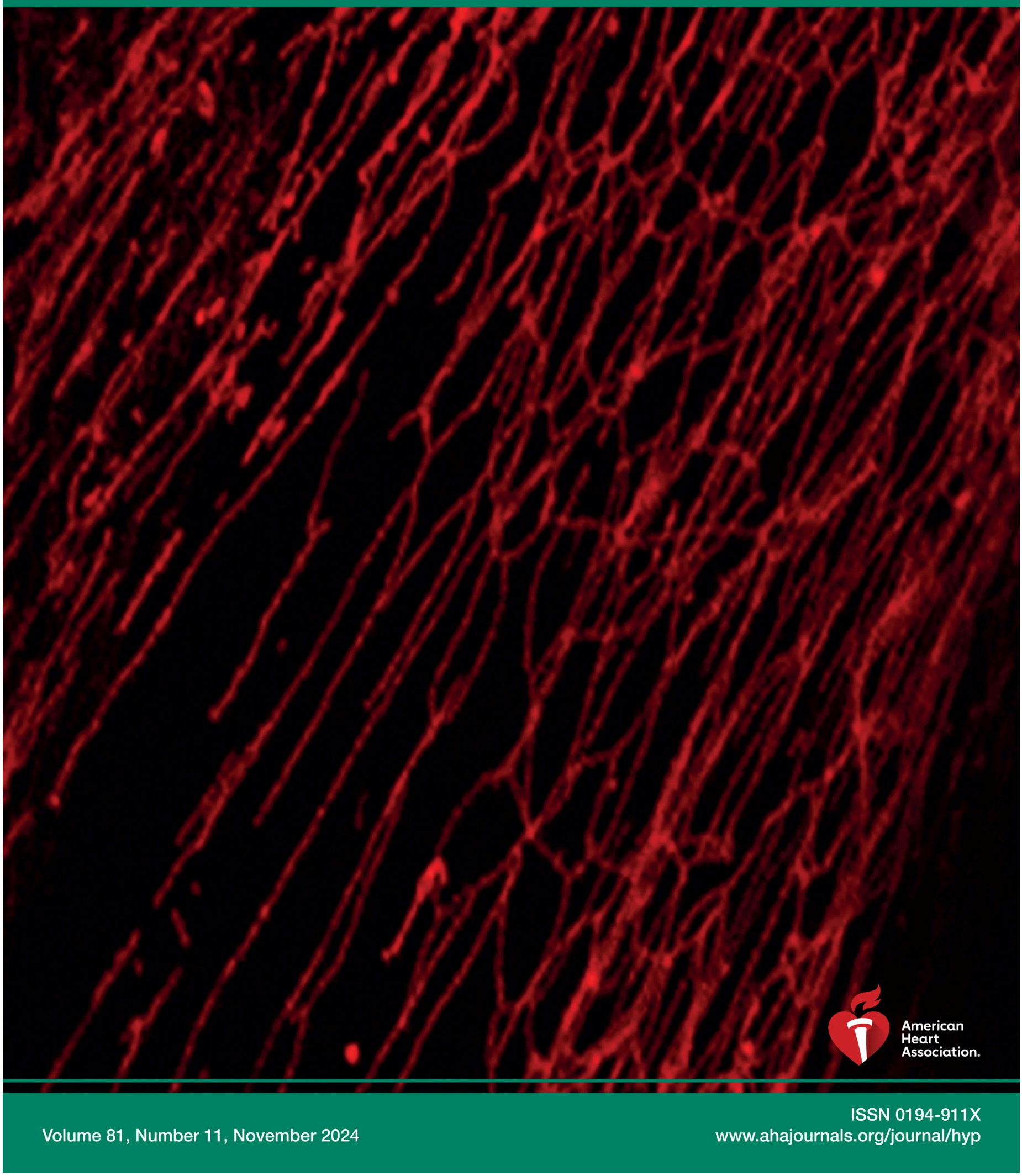


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