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Could monitoring normotensives delay progression to hypertension?

Dear Editor,

We have read with great interest the recently published article by lannucci et al¹ entitled "Office normotensives with a minimal augmentation of intima-media thickness of common carotid arteries: really normotensives?". In that well-described study, the authors¹ aimed to clarify whether an augmentation of the carotid intima-media thickness (cIMT) in office prehypertensives is a target organ damage (TOD) associated to monitoring prehypertension. The authors concluded that prehypertensive patients may have an increased cIMT, considered as TOD, and pharmacological treatment may be considered in order to prevent progress to hypertension until irreversible TOD. Although this current study provides us exhaustive information, some comments may be of beneficial.

The blood pressure progression from normal level to the hypertension has been found to be associated with increased cardiovascular (CV) mortality and morbidity². In addition to hypertension, Cugini et al³ has mentioned that masked prehypertension could be seen as a preclinical condition of potential CV risk, and he defined the prehypertensive status as a pathogenetic CV factor instead of a risk factor.

It has been known that IMT augment in the common carotid artery is strongly related to hypertension, and prehypertensive patients had been found to have higher common cIMT than normotensives⁴. Although, in recently published guidelines⁵, carotid wall thickening has been regarded as one of the factors used for stratification of total CV risk in hypertensives, it is mentioned that measurements of cIMT cannot be supported for clinical use in patients at low CV risk. Nonetheless, Peters et al⁶ concluded that the added predictive value of additional carotid screening may be observed in asymptomatic individuals at intermediate or higher CV risk.

Consequently, it could be concluded from the article that normotensive (but presumable prehypertensive) patients showing an increase of cIMT could be monitored with the ambulatory blood pressure monitoring, thereby recognizing masked prehypertensives. There is no enough proof to recommend carotid ultrasonography monitoring and antihypertensive therapy yet. Although it has been shown that antihypertensive therapy in patients with high normal blood pressure could delay progression to hypertension, it remains to be proven whether antihypertensive management could delay CV events and be cost-effective^{7,8}.

Conflict of Interest

The Authors declare that they have no conflict of interests.

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