The Role of Inter-arm Blood Pressure Difference in the Diagnosis and Follow-up of Hypertension

Hipertansiyonun Tanı ve Takibinde Kollar Arası Kan Basıncı Farkının Rolü

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Dear Editor,

I found the study titled "Interarm Blood Pressure Difference as a Predictor of Contrast-Induced Acute Kidney Injury in Patients Undergoing Peripheral Vascular Interventions" by Karaduman et al. (1), published in the Journal of Harran University Medical Faculty, quite interesting. I would like to highlight some key aspects of this well-written study.

Recent hypertension management guidelines from Europe, the United Kingdom (UK), and Canada recommend measuring blood pressure (BP) in both arms during the initial assessment of a patient for hypertension. (2–4). Inter-arm BP difference (IABPD) is classified as: <5 mmHg normal, 5–10 mmHg low risk, 10–15 mmHg moderate risk, and >15 mmHg high risk for vascular events (5).

IABPD is frequently encountered in patients with hypertension. A systolic IABPD \geq 10 mmHg was found in 11.2% of hypertensive patients, 7.4% of those with diabetes, and 3.6% of the general population. Systolic IABPD \geq 10 mmHg was linked to increased cardiovascular death, and \geq 15 mmHg to all-cause mortality (6).

et al. studied the right-left arm BP difference in hypertension detection. They found sensitivity for detecting hypertension was 90.6% when measured in the right arm and 83.4% in the left. Sensitivity was 87.9% and 87.1% in men, and 95.4% and 76.9% in women (7). Similarly, higher BP was observed in the right arm in Karaduman et al.'s study.

In conclusion, single-arm measurements may underestimate hypertension prevalence. If double-arm measurements are unavailable, the right arm is preferred, especially in women.

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