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Uric Acid/Albumin Ratio: Beyond Risk Stratification to Therapeutic Guidance in Hypertension

Ürik Asit/Albümin Oranı: Hipertansiyonda Risk Sınıflandırmasının Ötesinde Tedaviye Yön Veren Bir Parametre

LETTER TO THE EDITOR
EDİTÖRE MEKTUP

To the Editor,

We read with great interest the study by Karayiğit et al.,[1] titled "The Correlation Between Serum Uric Acid/Albumin Ratio and Circadian Rhythm of Blood Pressure in Patients with Hypertension". The authors are to be commended for identifying an independent association between an elevated uric acid/albumin ratio (UAR) and a non-dipper blood pressure pattern—an abnormal circadian rhythm known to predict adverse cardiovascular outcomes.

The study enriches the existing literature by suggesting a simple and low-cost biomarker for identifying high-risk hypertensive patients. However, while the retrospective design and lack of longitudinal data were acknowledged as limitations, we believe an additional aspect deserves further discussion: the potential of UAR as a therapeutic guide in hypertension management.

Recent evidence suggests that UAR is not only a surrogate of oxidative stress and systemic inflammation, but also a strong predictor of both cardiovascular and all-cause mortality. In a large prospective cohort study, Liu et al.[2] demonstrated that higher UAR levels were independently associated with increased risk of death, even after adjusting for traditional risk factors. Yin et al.[3] showed that elevated UAR levels may be an independent and effective biomarker for predicting poorly developed coronary collateral circulation development in Non-ST Elevation Myocardial Infarction patients.

Given these findings, several questions naturally arise:

- Could serial UAR measurements be used to track therapeutic response in hypertensive patients?
- Should a high UAR prompt more aggressive antihypertensive treatment, particularly in non-dipper profiles?
- Might urate-lowering or anti-inflammatory therapies offer additional benefit in patients with elevated UAR?
- Can UAR be incorporated into chronotherapeutic models, where treatment timing is individualized based on circadian risk patterns?[4]

As hypertension management evolves toward precision medicine, the need for accessible, dynamic and pathophysiologically relevant biomarkers becomes paramount. UAR may fulfill these criteria, but this promise requires validation in prospective, interventional studies. Particularly, studies examining whether targeted reduction in UAR leads to measurable improvements in cardiovascular outcomes would be of high clinical relevance.

We commend the authors for drawing attention to UAR as a novel biomarker in hypertension and encourage future research focused not only on its diagnostic relevance, but also on its potential to influence therapeutic decision-making.

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