



Perirenal Fat and Chronic Kidney Disease in Patients With Diabetes

Leonardo Roeвер,¹ Gary Tse,² and Giuseppe Biondi-Zoccai^{3,4}

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The burden of chronic kidney disease (CKD) in patients with diabetes is high, and recent studies have highlighted the key role of perirenal fat (PRF) thickness in its pathophysiology (1,2). Indeed, increased PRF thickness has been associated with an unfavorable profile of inflammatory cytokines, atherosclerosis, dyslipidemias, metabolic syndrome, and unfavorable outcomes after nephrectomy (3–11).

In this issue of *Diabetes*, an interesting study further contributes to the evidence base on this issue. Specifically, the authors measured PRF by computed tomography, whereas total body fat, subcutaneous adipose tissue, and visceral adipose tissue were assessed with DEXA. Subjects without CKD (estimated glomerular filtration rate >60 mL/min/1.73 m²) at baseline were asked to participate in the follow-up. A total of 190 participants were included in the cross-sectional analysis, with a median follow-up time of 24.5 months (13.7, 42.0) (1). The study findings confirmed the key impact of PRF on adverse cardiovascular risk features, as well as CKD progression.

Among the limitations of the study, investigators did not include measurements for several important anthropometric parameters such as waist-to-hip ratio and neck circumference, and the same applies to several important dimensions of adverse cardiac remodeling and vascular function (12,13). Of course, this association study, as any other observational study, can be considered not conclusive but, rather, mainly suggestive of causality.

In conclusion, PRF appears as a novel independent risk factor for CKD progression and is even associated with car-

diorenal dysfunction. Thus, early detection and treatment may contribute to the reduction of the global burden of these diseases.

Duality of Interest. G.B.-Z. has consulted for Cardionovum, CrannMed, InnovHeart, Meditrial, OpSens Medical, and Replycare. No other potential conflicts of interest relevant to this article were reported.

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¹Department of Clinical Research, Federal University of Uberlândia, Uberlândia, Brazil

²Tianjin Key Laboratory of Ionic-Molecular Function of Cardiovascular disease, Department of Cardiology, Tianjin Institute of Cardiology, Second Hospital of Tianjin Medical University, Tianjin, China

³Department of Medical-Surgical Sciences and Biotechnologies, Sapienza University of Rome, Latina, Italy

⁴Mediterranea Cardiocentro, Naples, Italy

Corresponding author: Leonardo Roeвер, leonardoroeвер@hotmail.com

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See accompanying article, p. 2322.

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