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Evidence of retinal arteriolar narrowing in patients with autosomal-dominant polycystic kidney disease

Errata

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Abstract

Introduction. The aim of this study was to examine retinal vessels in autosomal dominant polycystic kidney disease (ADPKD) patients with normal kidney function and without diabetes mellitus.
Materials and Methods. We enrolled 39 adult individuals with ADPKD and 45 gender- and age-matched individuals as controls. A full ophthalmologic examination, including retinal vessel caliber and reactions to flicker stimulation analysis and grading of hypertensive retinopathy according to the Keith-Wagener classification, was performed.
Results. Multivariable analysis of ADPKD patients and controls, adjusted for age, gender, estimated glomerular filtration rate (e-GFR) and the presence of hypertension, revealed that ADPKD was an independent factor associated with lower arteriovenous ratio (AVR) values (by 0.069 on average, $\beta = -0.50$, $p < 0.0001$). The severity of hypertensive retinopathy according to the Keith-Wagener classification appeared to be more advanced in the ADPKD group than in the controls, despite the lack of vascular abnormalities, such as retinal hemorrhages, exudates, cotton wool spots or papilledema, as well as microaneurysms, which are very characteristic signs of ADPKD in other vascular beds.
Conclusions. Lower AVR values could be a specific pathophysiological ocular manifestation of systemic vasculopathy in the course of ADPKD.

Keywords

autosomal dominant polycystic kidney disease (ADPKD) • arteriolar narrowing • arteriovenous ratio • retinal vessel analysis (RVA)

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The description of the changes made

The Reference list was incorrect. The correct References list appears below.

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