REPLY:

We would like to sincerely thank Dr Niemczyk for his commentary on our recent article. We agree that despite the increased risks of aneurysm repair in patients with autosomal dominant polycystic kidney disease (ADPKD), aneurysm screening programs are beneficial in this population.¹ The issue then arises of how to risk-stratify these patients once aneurysms are discovered. As Dr Niemczyk states, the aneurysms in this patient population must be treated as unique entities and the traditional risk-stratification methods may not be entirely accurate. While it is known that patients with ADPKD present with subarachnoid hemorrhage earlier in life compared with the general population, once the aneurysm ruptures, they have mortality rates similar to those of the general population.²⁻⁵ Little else is known, however, about the potentially increased risks of rupture in this patient group.

The recently published Unruptured Intracranial Aneurysm Treatment Score lists ADPKD as an independent risk factor for rupture, with a risk score equivalent to that of hypertension, drug abuse, and Japanese or Finnish ethnicity.⁶ Another recently published PHASES (Population, Hypertension, Age, Size of Aneurysm, Earlier SAH, and Site of Aneurysm) scoring system does not specifically take into account ADPKD status but does state that Finnish or Japanese ethnicity increases the risk of aneurysm rupture by 2.0–3.6 times.⁷ These findings raise the question of whether patients with ADPKD should be approached with a treatment paradigm similar to that in these high-risk groups.

We recommend that all treatment-related decisions be made on an aneurysm- and patient-specific basis by multidisciplinary consensus. With this in mind, further research is needed to better risk-stratify aneurysms in patients with ADPKD.

<http://dx.doi.org/10.3174/ajnr.A4657>

REFERENCES

1. Rozenfeld MN, Ansari SA, Shaibani A, et al. **Should patients with autosomal dominant polycystic kidney disease be screened for cerebral aneurysms?** *AJNR Am J Neuroradiol* 2014;35:3–9 [CrossRef Medline](#)
2. de la Monte SM, Moore GW, Monk MA, et al. **Risk factors for the development and rupture of intracranial berry aneurysms.** *Am J Med* 1985;78(6 pt 1):957–64 [CrossRef Medline](#)
3. Schievink WI, Torres VE, Piepgras DG, et al. **Saccular intracranial aneurysms in autosomal dominant polycystic kidney disease.** *J Am Soc Nephrol* 1992;3:88–95 [Medline](#)
4. Lozano AM, Leblanc R. **Cerebral aneurysms and polycystic kidney disease: a critical review.** *Can J Neurol Sci* 1992;19:222–27 [Medline](#)
5. Chapman AB, Johnson AM, Gabow PA. **Intracranial aneurysms in patients with autosomal dominant polycystic kidney disease: how to diagnose and who to screen.** *Am J Kidney Dis* 1993;22:526–31 [CrossRef Medline](#)
6. Etminan N, Brown RD Jr, Beseoglu K, et al. **The unruptured intracranial aneurysm treatment score: a multidisciplinary consensus.** *Neurology* 2015;85:881–89 [CrossRef Medline](#)
7. Greving JP, Wermer MJ, Brown RD Jr, et al. **Development of the PHASES score for prediction of risk of rupture of intracranial aneurysms: a pooled analysis of six prospective cohort studies.** *Lancet Neurol* 2014;13:59–66 [CrossRef Medline](#)

M.N. Rozenfeld

S.A. Ansari

Department of Radiology
Northwestern University Feinberg School of Medicine
Chicago, Illinois

P. Mohan

Department of Radiology
University of Miami
Miami, Florida

A. Shaibani

E.J. Russell

M.C. Hurley

Department of Radiology
Northwestern University Feinberg School of Medicine
Chicago, Illinois