Letter by Zou and Zheng Regarding Article, “Fibroblast Growth Factor 23 and Risk of Incident Stroke in Community-Living Adults”

To the Editor:

Fibroblast growth factor 23 (FGF23) is a hormone that regulates phosphorus and vitamin D metabolism. Associations of FGF23 with stroke outcomes are less clear. A recent article by Panwar et al. indicated that there was a graded association of FGF23 with risk of cardioembolic stroke, but there was no significant association between FGF23 with other ischemic stroke subtypes or with hemorrhagic strokes.

Other studies have been performed on this similar topic. Elevated FGF23 has been linked with a greater risk of cardiovascular mortality and combined vascular outcomes that included stroke, but few studies have detected stroke separately, even in subtype of stroke. di Giuseppe et al. provided epidemiological evidence for potential relationships between FGF23 and risk of developing hemorrhagic stroke. Moreover, Wright et al. showed that participants with greater FGF23 levels had more incident strokes driven primarily by intracerebral hemorrhage risk. High FGF23 concentrations are associated with atherosclerosis burden, which is often attributed to stroke. However, Kestenbaum et al. indicated that FGF23 is not associated with carotid intima-medial thickness or stroke.

The mechanisms underlying the risk conferred by FGF23 of vascular outcomes are not completely understood. As described above, these findings suggest that FGF23 may be a good clinical biomarker thought to reflect patients with stroke. FGF23 seems to play a key role in the development of stroke. Additional studies with more patients that detect the association between FGF23 and different ischemic stroke subtypes will be needed to determine the precise roles of FGF23 in stroke. Therapeutic agents targeting FGF23 might result in innovative new therapies for patients with stroke. In summary, we greatly enjoyed reading the article by Panwar et al. and think that FGF23 may be useful for prevention and treatment of stroke.

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Disclosures

None.

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