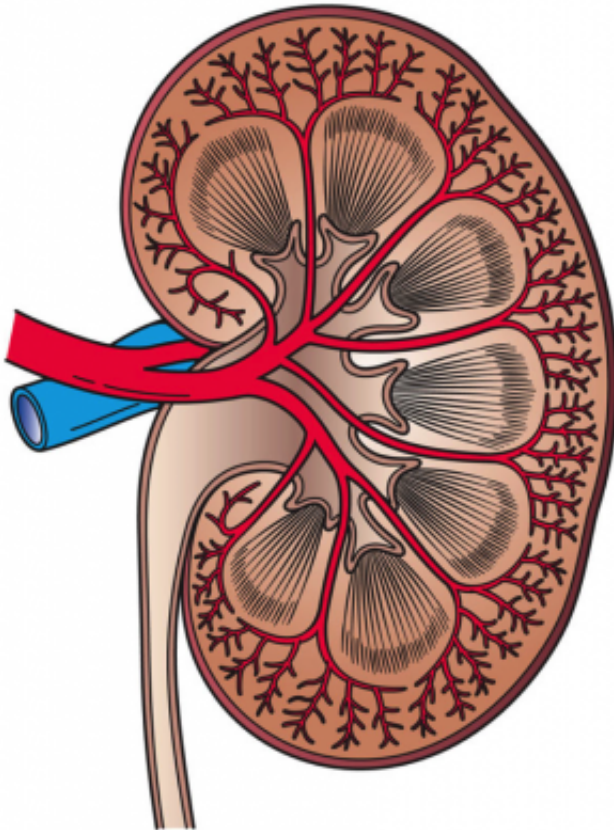


YAP after acute kidney injury

August 20 2018, by Sanjay Mishra



This image shows a cross section of a kidney. Credit: Holly Fischer/Wikipedia

Acute kidney injury (AKI)—sudden and rapid failure of the kidneys—affects up to 20 percent of hospitalized patients, and up to 70 percent of ICU patients.

Studies have indicated that dedifferentiation and proliferation of

surviving [kidney cells](#) contributes to kidney regeneration and recovery from AKI. EGF receptor (EGFR) and Hippo signaling pathways, which regulate [cell proliferation](#) and death, are important to this process.

Now, Jianchun Chen, MD, Raymond Harris, MD, and colleagues report in the *Journal of the American Society of Nephrology* that YAP, a key effector of the Hippo signaling pathway, is involved in AKI recovery.

They showed that in both human patient and mouse kidneys, YAP was activated in renal proximal tubule epithelial cells after AKI. YAP activation through an EGFR-dependent signaling pathway promotes kidney repair in response to AKI. The study suggests that YAP activation may be a target for treatment of AKI.

More information: Jianchun Chen et al. EGF Receptor–Dependent YAP Activation Is Important for Renal Recovery from AKI, *Journal of the American Society of Nephrology* (2018). [DOI: 10.1681/ASN.2017121272](#)

Provided by Vanderbilt University

Citation: YAP after acute kidney injury (2018, August 20) retrieved 1 February 2024 from <https://medicalxpress.com/news/2018-08-yap-acute-kidney-injury.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--