YAP after acute kidney injury

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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.


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