New imaging protocols help improve systemic functioning for living renal donors

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(Medical Xpress) -- A new study from UCLA shows how magnetic resonance angiography (MRA) and computed tomography angiography (CTA) are equivalent in delineating anatomy in living renal donors.

In a study that examined 30 patients and 60 kidneys, both modalities were "excellent" in detecting the number of renal arteries and veins. Dr. Mittul Gulati, lead author for the study noted, "either MRA or CTA are great tools for helping surgeons remove kidneys safely, identifying donor and recipient veins and vessels, and identifying incidental findings."

The results could potentially reduce radiation exposure for patients. Dr. Gulati noted, "Both imaging techniques complement each other and limit additional examinations for our patients." The combined studies also showed significant agreement between readers in the number of renal vessels, early arterial bifurcation, and late confluence of the left renal vein.

Ultimately, Dr. Gulati predicts that these techniques will help to improve evaluation for living renal donors. He said, "Consistently using MRA in renal donors, in addition to or as a substitute for CTA, shows promising results and warrants further investigation."

The study is being presented April 28, 2012 at the American Roentgen Ray Society Annual Meeting in Vancouver, Canada.

Provided by American Roentgen Ray Society