STUDY EXAMINES RELIABILITY OF BIOPSIES FROM DONATED KIDNEYS PRIOR TO TRANSPLANTATION

Highlight
• In analyses of biopsies of deceased donor kidneys, a repeat biopsy often showed very different findings than the initial biopsy, calling into question decisions to decline an organ based on the initial biopsy findings.
• Although the first biopsy findings were not associated with post-transplant outcomes, findings from the second biopsies—which were performed in a relatively standardized manner at one organ procurement organization and read by the same group of pathologists—provided useful information about how well the organ functioned after transplantation.

Washington, DC (January 23, 2020) — A new study indicates that biopsies of donated kidneys are likely not useful for assessing organ quality prior to transplantation unless standards are set for how they should be performed and interpreted. The findings appear in an upcoming issue of CJASN.

There is currently a large shortage of donated kidneys that leads to the death of many patients with kidney failure in need of a transplant; however, 1 out of every 5 kidneys recovered for the purpose of transplantation is not transplanted, largely due to concerns over organ quality that often stem from the results of a biopsy.

To determine whether a donated kidney is suitable for transplantation, clinicians often examine biopsy samples from the kidney under a microscope. Prior studies have shown mixed results about whether these findings are actually reliable, however.

To look into the issue, a team led by S. Ali Husain, MD, MPH and Sumit Mohan, MD, MPH (Columbia University Irving Medical Center) conducted a study of 606 kidneys that had 2 separate biopsies performed. The researchers found that the results were often quite different between the biopsies, and that only the second biopsies yielded useful information about kidney quality that correlated with how well the organ functioned after transplantation. Kidneys that underwent multiple biopsies were overwhelmingly first biopsied at other organ procurement organizations, whereas almost all of the second biopsies were performed and interpreted at the investigators’ local organ procurement organization.
“These findings suggest that current decision-making about kidney quality may often be based on misleading information, but that standardizing biopsy techniques may result in more helpful biopsies,” said Dr. Husain.

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