

Age, not post-op infection, more important for kidney transplant success, study finds

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Infection by virus cytomegalovirus (CMV) is a common and major complication following kidney transplantation. Previous studies have related CMV infection with increased kidney transplant failure and reduced patient survival. However, a new study published in the *American Journal of Physiology—Renal Physiology* reports that the age of the donor and the recipient, not CMV infection, are more important factors in determining transplant success.

The study followed the outcomes of 594 patients who underwent [kidney transplantation](#) over a 10-year period. The researchers tracked CMV infection, damage to and loss of transplanted kidney function, the working lifespan of the transplant and patient survival. The key findings are:

- Patients with CMV had a higher prevalence of damage to the transplanted kidney before CMV infection occurred, suggesting that likelihood of transplant damage was related to the organ donor and not the infection, the researchers wrote.
- Statistical analyses revealed that transplant failure was associated with older donor age and poor transplant function occurring soon after operation. The CMV infection was not a significant factor.
- Twenty-six percent of the [transplant recipients](#) in the study developed CMV infections. All infections occurred within the first year of transplantation, most within the first three months.
- At six weeks post-operation, function of the transplanted kidney in patients with CMV was not different than in patients without CMV. However, the transplant in patients with CMV had faster loss of function, leading to shorter lifespan of the transplanted kidney.

The findings suggest that other factors, such as

donor and patient age, are more important for long-term transplant and patient outcome, the researchers concluded.

The study "Long-term impact of CMV infection on the allograft and on patient survival in renal transplant patients with protocol biopsies" is published ahead-of-print in the *American Journal of Physiology—Renal Physiology*.

More information: "Long-term impact of CMV infection on the allograft and on patient survival in renal transplant patients with protocol biopsies." *Renal Physiology* Published 9 September 2015 Vol. no. , [DOI: 10.1152/ajprenal.00317.2015](https://doi.org/10.1152/ajprenal.00317.2015)

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