

Drugs that prevent blood clots may protect organs during transplantation

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Organs can become significantly damaged during transplantation, but a new article published in the *BJS (British Journal of Surgery)* offers a protective strategy that could keep them safe and allow them to function optimally after the procedure.

When an organ is transplanted from a donor to a recipient, there is a period of time when the organ is deprived of normal blood flow. While this in itself can cause tissue damage, additional damage may also occur when blood flow is restored to the organ due to a high risk of [blood clotting](#).

Investigators led by Thierry Hauet, MD, PhD, of the Institut National de la Santé et de la Recherche Médicale (INSERM), the University of Poitiers, and the Centre Hospitalier Universitaire (CHU) de Poitiers, in France, wondered whether anticoagulants or "blood thinners" might help protect transplant organs against these effects. The team tested the potential of fondaparinux in an experimental model of [kidney transplantation](#). Use of the anticoagulant was linked with improved kidney function both immediately after transplantation and several months later.

"People die every day from the lack of available organs. This study demonstrates the benefits of [anticoagulation therapy](#) using new and original drugs at the time of organ collection," said Dr. Hauet. "Such therapy could augment the pool of available organs and allow for the safe use of marginal organs, which have characteristics associated with

poorer outcomes or come from donors with medical complexities."

Such an anticoagulation strategy could be an important addition to current transplant protocols to limit [tissue damage](#) and improve outcomes in patients receiving kidney, liver, pancreas, lung, heart, and other [organ transplants](#).

More information: "Kidney graft outcome using an anti-Xa therapeutic strategy in an experimental model of severe ischaemia-reperfusion injury." S. Tillet, S. Giraud, P. O. Delpech, R. Thuillier, V. Ameteau, J. M. Goujon, B. Renelier, L. Macchi, T. Hauet, and G. Mauco. *Br J Surg*; Published Online: November 17, 2014. [DOI: 10.1002/bjs.9662](#)

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