

British team perform new 'warm' liver transplants

March 15 2013

British surgeons said Friday they have performed successful liver transplants on two patients using a revolutionary technique which keeps the organ warm and functioning while outside the body.

The team, working at King's College Hospital in London, say the procedure could significantly increase the number of organs available for transplant.

Donor organs are currently put on ice while awaiting transplantation to slow their metabolism, but this often leads to them being damaged.

If the original organ was already damaged in some way, it is often rendered unusable.

The new technology, developed over 20 years by engineers at Oxford University, keeps the <u>liver</u> "warm" by circulating <u>red blood cells</u> through its <u>capillaries</u>.

Once on the machine, the liver functions as it would inside a human body, regaining its colour and producing bile.

"It was astounding to see an initially cold grey liver flushing with colour once hooked up to our machine and performing as it would within the body," said Oxford's Professor Constantin Coussios, one of the machine's <u>inventors</u>.



"What was even more amazing was to see the same liver transplanted into a patient who is now walking around."

The technology is still in its early stages, but its successful use in two transplants at King's College Hospital last month has raised hopes that it could be a game-changer.

Wayel Jassem, consultant <u>liver transplant</u> surgeon at King's who performed the two operations, said it gives doctors more time to test the liver to maximise the chance of a successful outcome.

"This technology has the potential to be hugely significant, and could make more livers available for transplant, and in turn save lives," he said.

There is huge demand for liver transplants, with 30,000 people in Europe and the United States currently on waiting lists—a quarter of whom will die before they have the operation, the team says.

But more than 2,000 livers are discarded every year because they are either damaged by oxygen deprivation or do not survive being put on ice.

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Citation: British team perform new 'warm' liver transplants (2013, March 15) retrieved 30 December 2023 from https://medicalxpress.com/news/2013-03-british-team-liver-transplants.html

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