Recycling Patient Blood Could Make a Comeback in Surgery

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Recycling a person's blood back into his or her body during surgery—a practice made popular in the 1980s, when the risk of transmitting HIV and hepatitis via donated blood was far higher—could make a comeback, The Washington Post reports.

That's because a new study from Johns Hopkins University, published in the journal Anesthesia and Analgesia, has found that the practice could actually yield better and cheaper recoveries for post-op patients than using donated blood.

The new research supports the findings of five other large studies, which have shown that people receiving their own fresh blood during surgery rather than blood from storage banks were less likely, or at least no more likely, to experience a heart attack, stroke, death or infection after surgery.

At Johns Hopkins, researchers divided 32 surgery patients into three groups to compare their recovery outcomes. One group got only recycled blood from their own bodies; the second received mostly recycled blood supplemented with a small amount of banked blood; the last group got a larger amount of stored blood along with some of their own recycled blood.

Scientists found that the patient groups receiving banked blood did worse. They also found that the cell membranes of the banked blood had seemingly hardened during the time it spent on hospital shelves, making the cells unable to squeeze through the body's smallest capillaries to deliver oxygen to its tissues.

Researchers also noted that banked blood was more expensive, costing around $240 per unit. Recycled blood, however, cost only $120 for its initial equipment set-up, then virtually nothing after that.

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