

Kidney donor stress may lead to failure

Tim Bugler

Some kidney transplants do not work because the donors had “worn out” the organs, according to a new study by Scottish scientists.

They found that a kidney’s former owner’s lifestyle is a bigger factor than transplant stress in determining whether the surgery succeeds or fails.

The team, at the University of Glasgow’s Institute of Cancer Sciences, say they have found a “molecular signature” for “wear and tear” of kidneys, known as allostatic load. This accumulates as an individual is exposed to repeated or chronic stress, reflecting a person’s lifestyle and life events.

The scientists studied kidneys that failed to work after transplantation. The kidneys that displayed impaired function appeared to be predisposed to a greater response to transplant stress and take longer to resolve this.

Paul Shiels, professor of geroscience, said: “Not only have we identified the reason why some kidney transplants don’t work when transplanted, we also demonstrate that miles on the biological clock affect the physiological function of organs.”

