

Doctors find way to beat dehydration and save lives

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A SIMPLE technique to make sure patients do not dehydrate during surgery saves lives and money, experts said yesterday.

Patients who have to undergo operations lasting several hours are at risk of a condition known as hypovolaemia, which can cause result in major organ failure and death.

But doctors at the Royal Alexandra Hospital in Paisley have been using a new technique which reduces these risks and means patients can leave hospital a lot quicker. They now hope

that more hospitals will follow their lead and adopt the technique, which could save NHS boards £2 million a year.

The procedure, known as haemodynamic optimisation, uses an ultrasonic probe to accurately measure fluid levels.

The probe is inserted down the patient's throat and attached to a monitor. This allows fluid levels to be topped up as necessary to prevent dehydration.

Hypovolaemia causes problems with the blood circulating and occurs when there is not enough fluid in the body to take oxygen to the vital organs.

Almost all patients having



Dehydration in operations can lead to hypovolaemia, which can cause death

Picture: Getty Images

surgery suffer from the condition to some extent due to the effects of not eating or drinking before the operation, the impact of the anaesthetic gases and the trauma of the surgery itself.

Dr David Alcorn, of the Royal Alexandra Hospital, said they carried out an audit of 30 patients having major bowel

surgery, mostly for cancer. Those whose fluid levels were monitored stayed in hospital for an average of 9.55 days after surgery, compared to 12 days for other patients.

The audit is now being studied by doctors across the UK, including the Improving Surgical Outcomes Group (ISOG).

At a meeting in Glasgow yesterday, Professor Monty Mythen of the ISOG said that it was possible hospital stays could be brought down to four days.

"Improving surgical outcomes and reducing patient suffering is a major goal. But by doing this we are also saving the taxpayers money by reducing



Dr David Alcorn with the machine used in the trials

stays," he said. Dr Alcorn added that the audit in Paisley resulted in a saving of about £37,500.

He said: "The cost of one machine is £7,000, with an extra cost of about £100 per patient.

"We hope to be able to use the procedure in more people having lengthy operations."

Dr Alcorn said if patients were in hospital for shorter periods they were also less susceptible to infections such as MRSA.

Prof Mythen added: "One million patients treated by the NHS could benefit from this procedure every year.

"There are clearly significant financial savings possible."