

Acute Renal Failure

Renal failure occurs when the kidneys are unable to do their job: to filter wastes from the blood, help regulate blood pressure, and regulate salt and water balances in the body. As blood flows through the kidneys, it is filtered, and wastes are removed and sent to the bladder as urine. If kidney function becomes impaired, **acute** (rapid) or **chronic** (gradually developing) renal failure may occur. With acute renal failure, kidney function can return to normal if the underlying cause of the failure is discovered and successfully treated.

The November 27, 2002, issue of JAMA includes an article about treatment of acute renal failure.

FOR MORE INFORMATION

- National Institute of Diabetes & Digestive & Kidney Diseases
800/891-5390
www.niddk.nih.gov
- National Kidney Foundation
800/622-9010
www.kidney.org
- Kidney & Urology Foundation of America
800/633-6628
www.kidneyurology.org
- American Association of Kidney Patients
800/749-2257
www.aakp.org
- American Kidney Fund
800/638-8299
www.akfinc.org

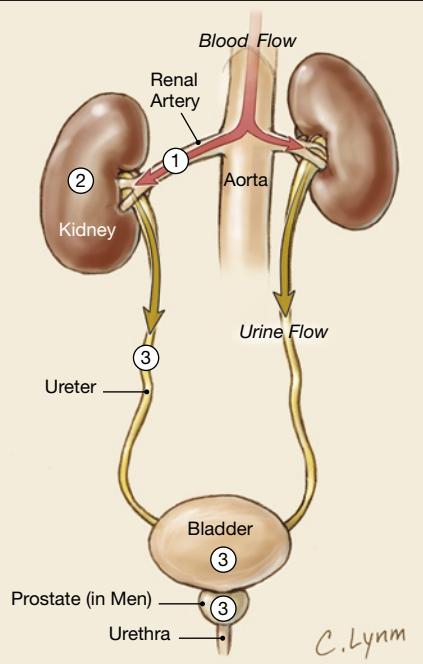
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To find this and previous JAMA Patient Pages, go to the Patient Page Index on JAMA's Web site at www.jama.com. A Patient Page on kidney failure was published in the December 12, 2001, issue.

Sources: Kidney & Urology Foundation of America, National Kidney Foundation, National Institute of Diabetes & Digestive & Kidney Diseases

CAUSES OF ACUTE RENAL FAILURE

- 1 **Prerenal**
Sudden and severe drop in blood pressure (**shock**) or interruption of blood flow to the kidneys from severe injury or illness
- 2 **Intrarenal**
Direct damage to the kidneys by inflammation, toxins, drugs, infection, or reduced blood supply
- 3 **Postrenal**
Sudden obstruction of urine flow due to enlarged prostate, kidney stones, bladder tumor, or injury



SYMPTOMS OF ACUTE RENAL FAILURE

The symptoms of the underlying cause of acute renal failure may be more prominent, but the following symptoms of acute renal failure may occur

- Little or no urine output (in some cases, urine output may continue)
- Foot, ankle, and leg swelling
- Drowsiness
- Shortness of breath

Acute renal failure is usually diagnosed by blood tests that indicate impaired kidney function. Treating the cause of acute renal failure can help restore kidney function rapidly. Abnormalities in blood pressure, amount of body fluid, and **electrolytes** (minerals in the blood) also need to be evaluated and treated. In some cases, **dialysis** (filtering of the blood outside the body using a machine) may be necessary to replace kidney function.

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