



[Home](#) → [Medical Encyclopedia](#) → Bilateral hydronephrosis

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Bilateral hydronephrosis

Bilateral hydronephrosis is the enlargement of the parts of the kidney that collect urine. Bilateral means both sides.

Causes

Bilateral hydronephrosis occurs when urine is unable to drain from the kidney into the bladder. Hydronephrosis is not itself a disease. It occurs as a result of a problem that prevents urine from draining out of the kidneys, ureters, and bladder.

Disorders linked with bilateral hydronephrosis include:

- Acute bilateral obstructive uropathy -- sudden blockage of the kidneys
- Bladder outlet obstruction -- blockage of the bladder, which does not allow drainage
- Chronic bilateral obstructive uropathy -- a gradual blockage of both kidneys is most often from a common singular obstruction
- Neurogenic bladder -- poorly functional bladder
- Posterior urethral valves -- flaps on the urethra that causes poor emptying of the bladder (in boys)
- Prune belly syndrome -- poorly emptying bladder that causes distention of the belly
- Retroperitoneal fibrosis -- abnormal scar tissue that blocks the ureters
- Ureteropelvic junction obstruction -- blockage of the kidney at the point where the ureter enters the kidney
- Vesicoureteric reflux -- backup of the urine from the bladder up to the ureter or kidney
- Uterine prolapse -- when the bladder drops down and presses into the vaginal area. This causes a kink in the urethra, which prevents the urine from emptying out of the bladder.

Symptoms

In a baby, signs of a problem are often found before birth during a pregnancy ultrasound.

A urinary tract infection in a newborn baby can signal a blockage in the kidney. An older child who gets repeat urinary tract infections should also be checked for blockage.

A higher than normal number of urinary tract infections is often the only symptom of the problem.

Common symptoms in adults may include:

- Back pain
- Nausea, vomiting
- Fever
- Need to urinate often
- Decreased urine output
- Blood in the urine
- Urinary incontinence

Exams and Tests

The following tests can show bilateral hydronephrosis:

- CT scan of the abdomen or kidneys
- Intravenous pyelogram (IVP), used less often
- Pregnancy (fetal) ultrasound
- Renal scan
- Ultrasound of the abdomen or kidneys

Treatment

Placing a tube into the bladder (Foley catheter) may open the blockage. Other treatments include:

- Draining the bladder
- Relieving pressure by placing tubes in the kidney through the skin
- Placing a tube (stent) through the ureter to allow urine to flow from the kidney to bladder

The underlying cause of the blockage needs to be found and treated once the buildup of urine is relieved.

Outlook (Prognosis)

Surgery performed while the baby is in the womb or shortly after birth can have good results in improving kidney function.

Return of renal function can vary, depending on how long the blockage is present.

Possible Complications

Irreversible kidney damage may result from conditions that cause hydronephrosis.

When to Contact a Medical Professional

This problem is often found by the health care provider.

Prevention

An ultrasound during pregnancy can show a blockage in the baby's urinary tract. This allows the problem to be treated with early surgery.

Other causes of blockage, such as kidney stones, can be detected early if people notice warning signs of kidney problems.

It is important to pay attention to general problems with urination.

Alternative Names

Hydronephrosis - bilateral

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