

## **Fact Sheet**

News from the IBD Help Center

## KIDNEY DISORDERS

The kidneys filter the body's blood supply and eliminate waste through urine. They are located in the center of the back just below the ribcage. Serious kidney complications associated with IBD are rare, but some less serious ones occur more frequently.

## **Complications**

Kidney stones are probably the most common kidney complications of IBD. Crohn's disease of the small intestine decreases the body's ability to absorb fat, leading to a specific type of kidney stone called oxalate. The risk for developing kidney stones of this type is higher in people who have had a number of small bowel resections. Symptoms may include sharp pain, nausea, vomiting, and blood in the urine. Kidney stone treatment calls for an increased fluid intake together with a low-oxalate diet (one that's rich in juices and vegetables). If the kidney stones do not pass spontaneously, it may be necessary to remove them surgically or with an endoscope (an instrument used to examine an internal part of the body with a lighted tube).

**Hydronephrosis** is an obstruction of one of the ureters, the tubes connecting the kidney to the bladder. It generally occurs with the right kidney because that is the one closest to the terminal ileum—the lower segment of the small intestine and the most common site of Crohn's disease. When the diseased ileum puts pressure on the ureter, urine cannot drain into the bladder. The blockage causes abnormal enlargement of the kidney and the formation of scar tissue. Signs and symptoms include a dull pain in the kidney area as well as blood or pus in the urine. Surgical intervention is usually required, with removal of the inflamed tissue and neighboring section of bowel, so that urinary flow is restored.

**Fistulas** are abnormal connections between the intestines and adjacent organs or skin. When a fistula develops between the intestine and the bladder or ureter, the result is frequent urinary tract infections and sometimes air in the urine. Medications can be used to close certain fistulas. However, when there is a fistula from the intestine to the bladder, surgery may be needed.

Amyloidosis involves the abnormal deposit of a protein (called amyloid) in various organ tissues, including the kidneys. Although it occurs more in Crohn's disease (affecting only about one percent of patients) than in ulcerative colitis, it is a relatively rare disorder and is generally only seen in cases of long-term and severe disease. Proteinuria, an elevated level of protein in the urine, is one sign of amyloidosis. A biopsy (tissue sample) of the kidney can confirm the diagnosis. Various medications may be effective in slowing or halting the condition.

Glomerulonephritis is a rare complication of IBD. An abnormality in the glomerulus, a cluster of blood vessels in the kidney, produces a lesion in the kidney that hinders its filtering ability. In extreme cases, kidney dialysis or transplantation may be required.

**Medications** can occasionally cause kidney complications. However, once the patient stops taking the drug in question, kidney function usually returns to normal. Mesalamine medications may produce kidney dysfunction in less than 1% of

patients. Immunosuppressive medications, such as cyclosporine, may cause constriction of the blood vessels in the kidneys, thereby altering kidney function. If this is not picked up quickly, kidney failure may result. Kidney function should be monitored in people with inflammatory bowel disease, regardless of which medication they are taking.

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