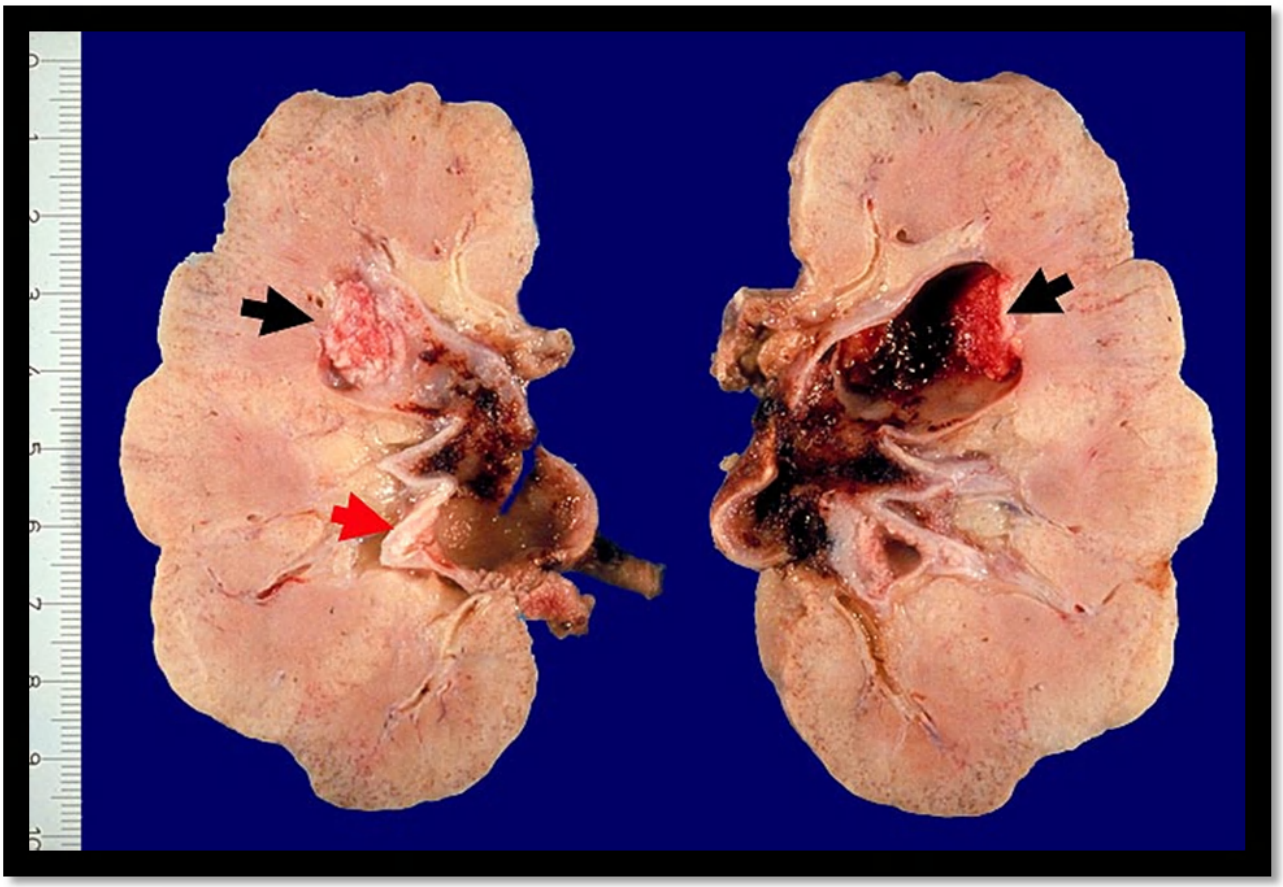
Analgesic Nephropathy



http://alf3.urz.unibas.ch/pathopic/getpic-img.cfm?id=1586

Analgesic nephropathy involves damage to one or both kidneys caused by overexposure to mixtures of medications, especially over-the-counter pain remedies (analgesics).

Causes

Analgesic nephropathy involves damage within the internal structures of the kidney. It is caused by long-term use of analgesics, especially over-the-counter (OTC) medications that contain phenacetin or acetaminophen and non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin or ibuprofen.

About 6 or more pills per day for 3 years increases the risk some for this problem. This frequently occurs as a result of self-medicating, often for some type of chronic pain.

Analgesic nephropathy occurs in about 4 out of 100,000 people, mostly women over 30. The rate has decreased significantly since phenacetin is no longer widely available in OTC preparations.

Risk factors include:

- Use of OTC analgesics containing more than one active ingredient
- Chronic headaches, painful menstrual periods, backache, or musculoskeletal pain
- Emotional or behavioral changes
- History of dependent behaviors including smoking, alcoholism, and excessive use of tranquilizers

Symptoms

There may be no symptoms. Symptoms of chronic kidney disease are often present over time and may include:

- Weakness
- Fatigue
- Increased urinary frequency or urgency
- Blood in the urine
- Flank pain or back pain
- Decreased urine output
- Decreased alertness
    - Drowsiness
    - Confusion, delirium
    - Lethargy
- Decreased sensation, numbness (especially in the legs)
- Nausea, vomiting
- Easy bruising or bleeding
- Swelling, generalized

Exams and Tests

A physical examination may show signs of interstitial nephritis or kidney failure.

Blood pressure may be high. The doctor may hear abnormal heart or lung sounds when listening to the chest with a stethoscope. There may be signs of premature skin aging.

Lab tests may show blood and pus in the urine, with or without signs of infection. There may be mild or no loss of protein in the urine.

Tests that may be done include:

- Complete blood count
- Examination of sediment or tissue passed in the urine
- Intravenous pyelogram (IVP)
- Toxicology screen
- Urinalysis

Treatment

The primary goals of treatment are to prevent further damage and to treat any existing kidney failure. The health care provider may tell you to stop taking all suspect painkillers, particularly OTC medications.

Signs of kidney failure should be treated as appropriate. This may include diet changes, fluid restriction, dialysis or kidney transplant, or other treatments.

Counseling, behavioral modification, or similar interventions may help you develop alternative methods of controlling chronic pain.

Outlook (Prognosis)

The damage to the kidney may be acute and temporary, or chronic and long term.

Possible Complications

- Acute renal failure
- Chronic renal failure
- Interstitial nephritis
- Renal papillary necrosis (tissue death)
- Urinary tract infections, chronic or recurrent
- Hypertension
- Transitional cell carcinoma of the kidney or ureter

When to Contact a Medical Professional

Call your health care provider if you have signs of this condition, especially if there has been a history of use of painkillers.

Call your health care provider if blood or solid material is present in the urine, or if your urine output decreases.

Prevention

Follow the directions of the health care provider when using medications, including OTC medications. Do not exceed the recommended dose of medications without the supervision of the health care provider.

Alternative Names

Phenacetin nephritis; Nephropathy - analgesic

Reference:

http://www.nlm.nih.gov