# Urethral Obstruction of Small Ruminants

*A PowerPage Presented By*


Urethral obstruction in goats and sheep typically occurs due to urolithiasis. The condition is primarily seen in males due to their urethral anatomy. This PowerPage briefly reviews key features of the condition.

## Underlying causes

- Urethral anatomy
  - Most uroliths lodge at the **urethral process** which is a narrow extension of the urethra at the tip of the penis.
  - The second most common site is the distal sigmoid flexure in the penis
- Urolithiasis
  - Most common are calcium based and/or struvite (magnesium ammonium phosphate)
  - **Animals on diets high in grain, phosphorus, and magnesium, and low in roughage are predisposed**

## Clinical Signs and Diagnosis

- Clinical signs of obstruction include:
  - Stranguria, dysuria
  - Hematuria
  - Oliguria, prolonged urination
  - Dribbling urine, tail flagging
  - Abdominal pain
  - Preputial swelling
- Obstruction may lead to hydronephrosis, bladder rupture, and/or azotemia/uremia causing:
  - Lethargy, depression, inappetance
  - Abdominal swelling (uroabdomen)
  - Recumbency, neurologic signs, death

## Treatment options

Management of metabolic or life threatening complications should be given priority. There are several surgical options for treatment of the obstruction. Choice depends on location of obstruction. After relieving obstruction, consider nutritional recommendations.

- Urethral process amputation- simplest procedure and most common site for obstruction; however, recurrent obstruction more proximally can occur
- Perineal urethrostomy (PU) – Animals can no longer be used for breeding
- Tube cystostomy- For animals with urethral rupture
- Bladder marsupialization or prepubic cystostomy- Can be used in animals with strictured PU sites