

Urinary Calculi

By: Jillian Craig

Urinary calculi also known as water belly primarily affects wethers but can also affect mature rams. Calculi or stones get trapped in the urinary tract and prevent the ram or wether from urinating. Male sheep on a low roughage, high grain diets are most susceptible. Concentrate diets high in phosphorous and magnesium or have a calcium-to-phosphorous imbalance are considered to be the major cause of this disease. Water high in minerals or an inadequate amount of water can also contribute to urinary calculi.

While the symptoms may vary, animals are usually restless and anxious. Sheep may have abdominal pain, distention and rupture of the urethra, urine dribbling, edema under the stomach and loss of appetite. The sheep will take on a 'hunched-up' appearance and urine may be bloody. Untreated animals will eventually die since the bladder bursts and urine is absorbed into the bloodstream.

Treatment depends on the location of the blockage. Snipping off the urethral process may all that is required or utilizing antispasmodics and tranquilizers may aid in dislodging calculi. In serious cases surgery or euthanasia may be recommended by a veterinarian.

In order to prevent the occurrence of urinary calculi sheep should be fed a 2:1 calcium-to-phosphorous ratio. Phosphorus and magnesium should not be added to diets. Including more roughage in the diet will help excrete phosphate in the urine. When feeding cereal grains, it is important to include other feedstuffs and minerals in order to make a balanced ration. Adequate water and salt intake are essential to prevent urinary calculi. Ammonium chloride can also be utilized in the diet to reduce the formation of calculi.

Information provided by: Susan Schoenian from Maryland Small Ruminant Page,
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