

Bovine Obstructive Urolithiasis **“Waterbelly”**

What is a “waterbelly”?

Steers or bulls can develop bladder stones that become too large to pass through the urethra during urination. If these stones get stuck in the urethra, they can block urine flow and cause urine to build up in the urethra and bladder. Pressure buildup from urine can cause leakage into the abdomen (bladder rupture) or under the skin (urethral rupture), giving the animal a bloated appearance—hence the name “waterbelly”.

Clinical Signs of Obstruction:

- **Early stages:** signs of discomfort including restlessness, pacing, kicking at belly, tail flagging, posturing to urinate while producing little or no urine
- **Advanced stages:** swelling around the sheath, abdominal distention, depression

Causes:

- **Reduced water intake** (common during cold weather)
- Alfalfa-rich diets
- High concentrate diets
- Living in regions with high soil silica content

When to call the vet:

Waterbellies are almost always an **emergency** so call at the first signs of general discomfort. An untreated complete blockage is likely to lead to death. Unfortunately, even with proper care the prognosis for full recovery is about 50%.

Treatment:

- **Medical:**
 - Ammonium Chloride boluses can dissolve some types of stones in the bladder.
 - Ammonium Chloride dose (using 12 g bolus): 8 boluses per 500# body weight by mouth once daily for up to 7 days
 - Increase water intake
 - Reduce alfalfa intake
 - Reduce concentrate intake in favor of higher forage content
- **Surgical:**
 - Call your vet to surgically remove the obstruction-causing stone. Two surgical options are available, depending on the location of the stone within the urethra:
 - Perineal urethrostomy (PU): turn the steer into a heifer!
 - Urethrotomy: find the stone, cut it out and sew the urethra back together
 - Medical treatment (listed above) should be used in conjunction with surgery to help prevent re-blockage.

Prevention is key: Drink more water! Increasing salt intake during cold weather will increase water consumption. This helps stones pass before they grow large enough to cause a blockage.