UROLITHIASIS IN SHEEP - 40 CASE REPORTS

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Urolithiasis is a common disease of the urinary system of SMALL RUMINANTS. It is less commonly seen in females and it most common in feedlot lambs. Eight lambs of various breeds and crossbreeds were confined for 45 days receiving a ration, after prior adaption to diet (10 days), with 10% of fiber content, 17.06% of crude protein and 0.33% of phosphorus and water ad libitum. Forty of these sheep presented urolithiasis at some time. The clinical signs of partially or completely obstructed urethra were characterized by dysuria, stranguria, apparent abdominal pain (stretching out all four limbs, kicking at the abdomen, looking at the side, etc), dyspnea, distended bladder and cyanosis of mucous membrane of the urethral process, suggesting tissue hypoxia. Seven animals showing above mentioned clinical signs also exhibited phimosis. After the beginning of the outbreak, a calcium carbonate mix with sodium chloride was made available freely in the feedlot, as well as tifton hay was used in order to increase the amount of fiber ingested by lambs, in order to prevent the emergence of new cases. Medical and/or surgical treatments were used. In 37 lambs, medical therapy with amputation of the urethral process and retrograde flushing of the urethra with weak acetic acid solution (1 part vinegar to 3 parts of sterile water) followed by administration of hyoscine butylbromide (5mg/kg/IV/BID) and ammonium chloride (300mg/kg/PO/SID) were used with good results. Surgical treatment was used in three lambs, urethrostomy in two and urethrostomy associated penectomy in one. The surgical treatments were unsuccessful. During the post surgical these animals received the same medical treatment listed above plus enrofloxacin (5mg/kg/SC/SID) and flunixin meglumine (1.1mg/kg/IV/BID). One lamb showed sudden death and during the post-mortem examination showed a large quantity of stones in urethra and in the ureters. The stones were analyzed and they were composed of calcium oxalate and calcium phosphate. We concluded that urolithiasis in sheep could be prevented by allowing access to fresh and clean water, maintaining the balance of calcium, phosphorous and magnesium levels in the diet, avoiding excess protein, controlling urinary pH, among others. The condition must be avoided not only for the costs provided for treatments, but also in order to maintain integrity of the physiological functions and ANIMAL WELFARE.