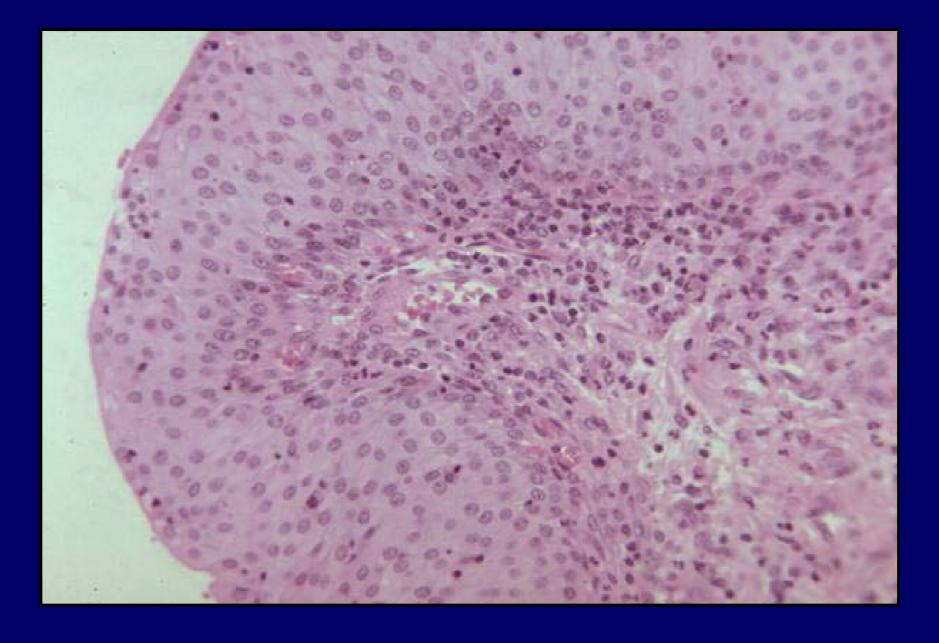
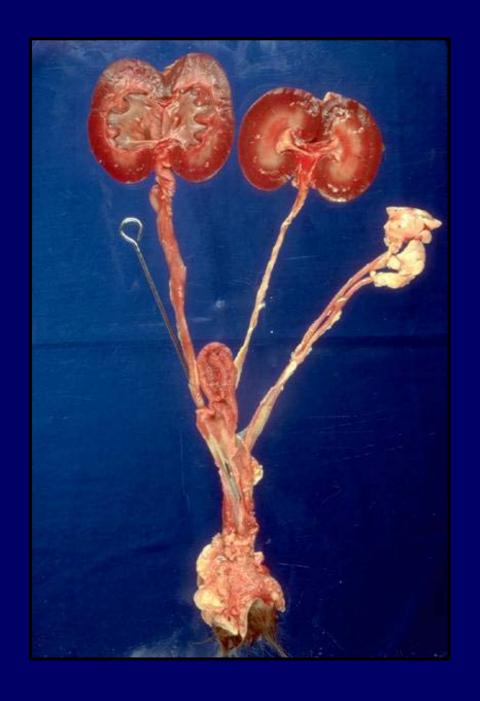
Lower Urinary Tract Pathology

Dog - chronic cystitis - hyperplasia of urothelium





Bitch – ectopic ureter with secondary unilateral hydroureter and hydronephrosis

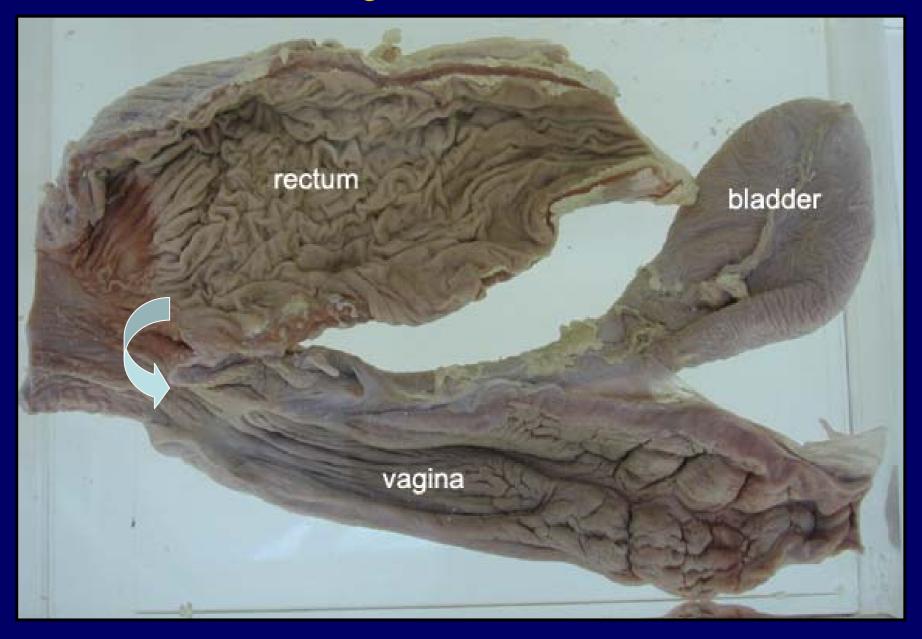
Dog – urachal diverticulum





Urachal cyst in a calf

Rectovaginal fistula in a cow





Dog – severe hydroureter and hydronephrosis

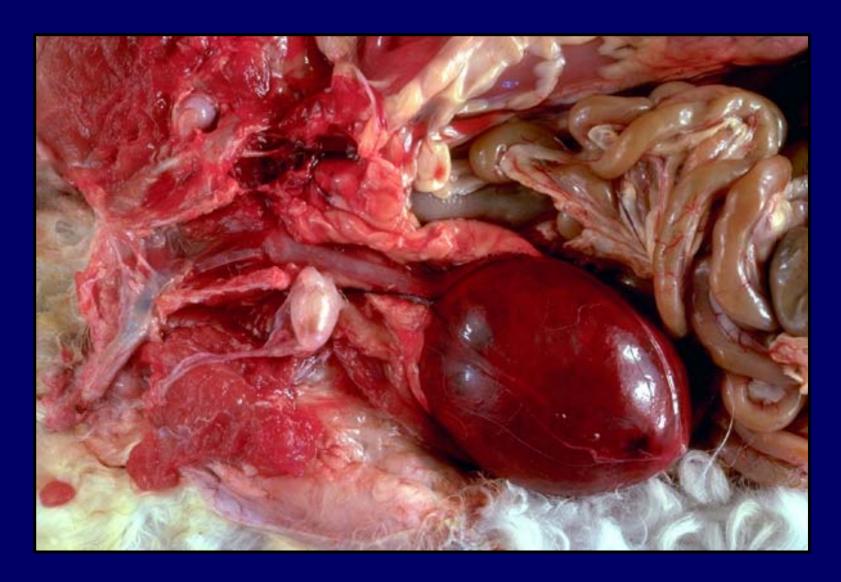
Dog – neurogenic bladder atony



Dog – chronic polypoid cystitis with severe hypertrophy of the smooth muscle of the bladder

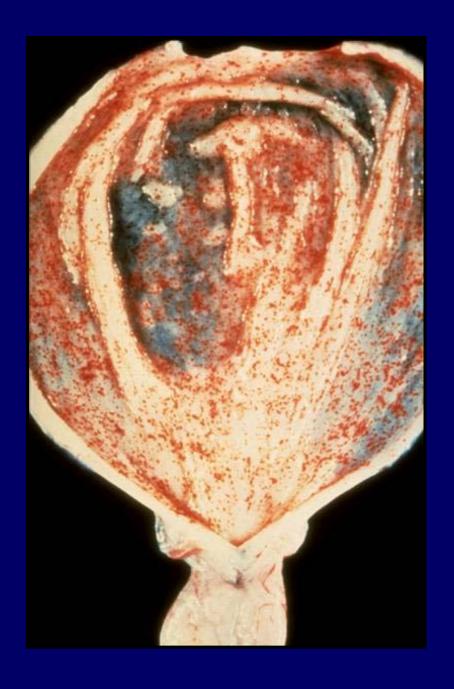


Cat – urethral obstruction by struvite crystals with haematuria, and marked bladder distension and venous infarction





Dog – acute haemorrhagic cystitis



Pig – bladder mucosal petechiae and submucosal haematomas – swine fever (hog cholera)

Dog – urolith from the urinary bladder





Dog – uroliths within the urinary bladder

Dog – uroliths within the urinary bladder



Dog – uroliths removed surgically from the urinary bladder



Sheep – staghorn clover stone in the renal pelvis

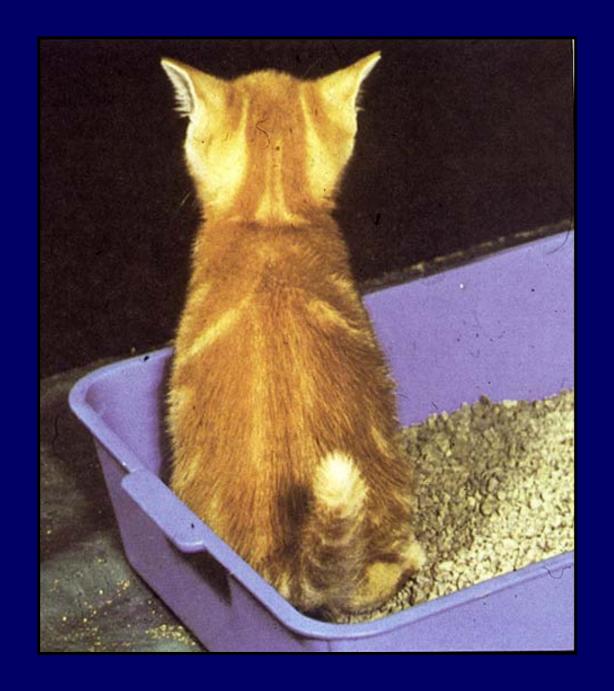


Ammonium biurate crystals in urine from a Dalmatian dog





Urate urolith in the renal pelvis of a Dalmatian dog

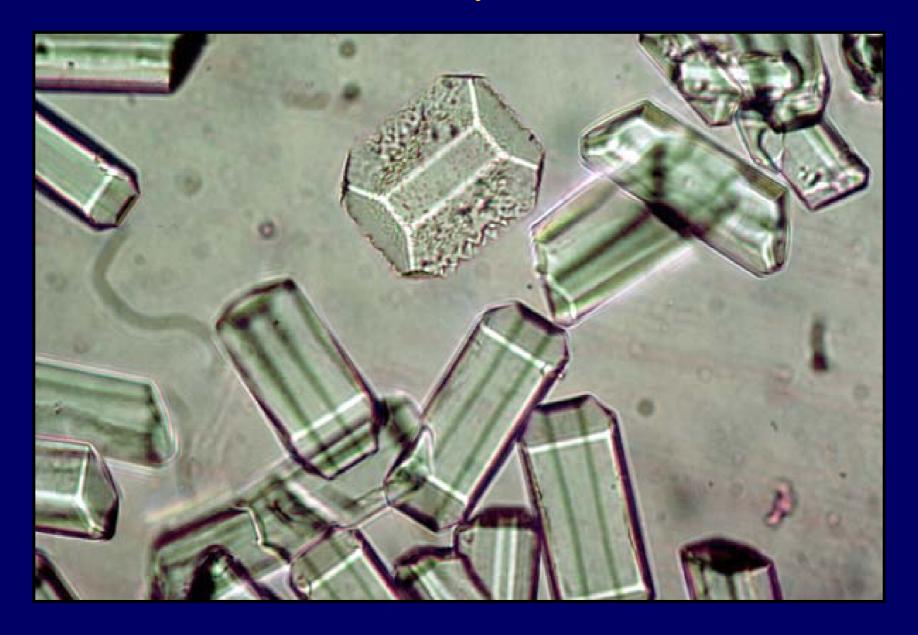


Decreased frequency of urination may promote supersaturation of urine

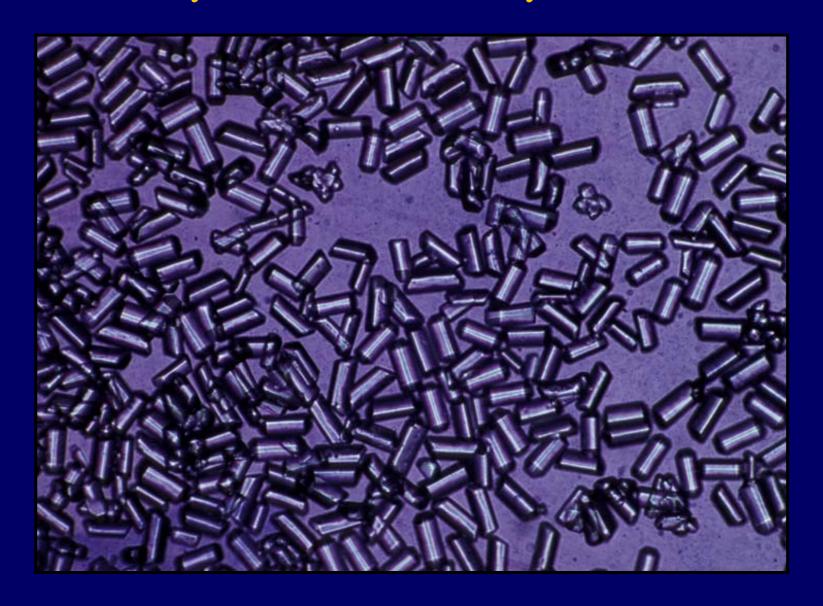
Calcium carbonate crystals are a normal finding in horse urine



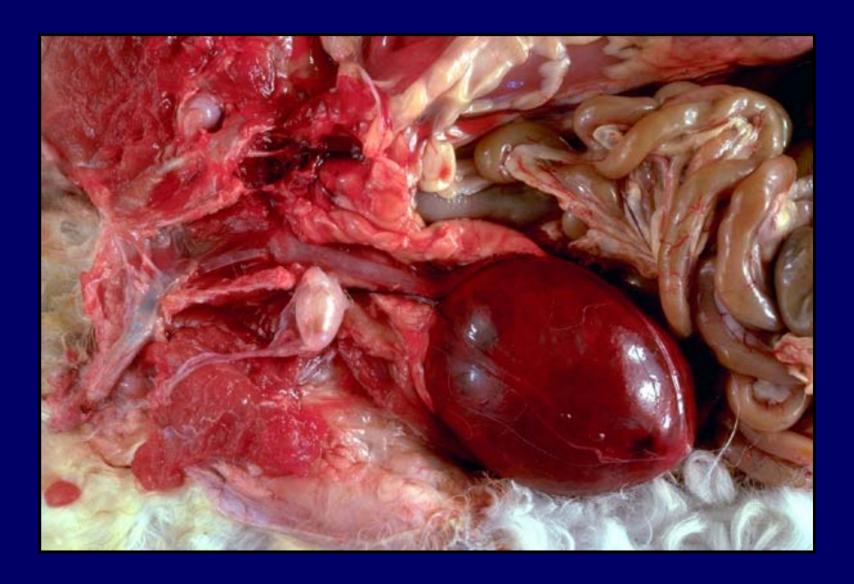
Cat – struvite crystals in urine



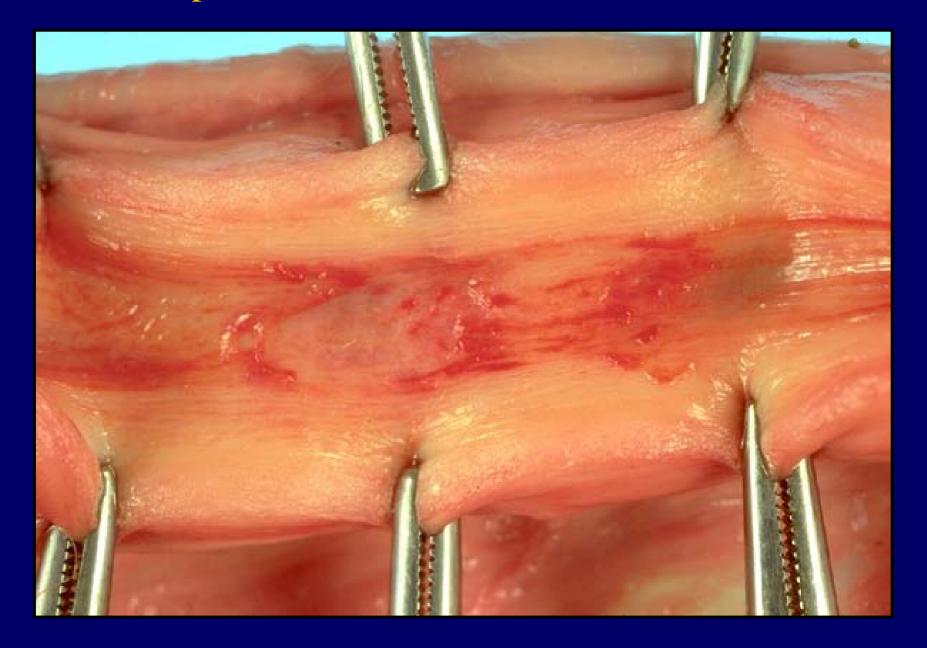
Abnormally numerous struvite crystals in cat urine



Tom cat – fatal urethral obstruction by struvite crystals



Bull – penile urethral ulceration due to urolithiasis



Bull – pressure necrosis of bladder mucosa due to urolithiasis



Wether – urethral obstruction by urolith with uroperitoneum

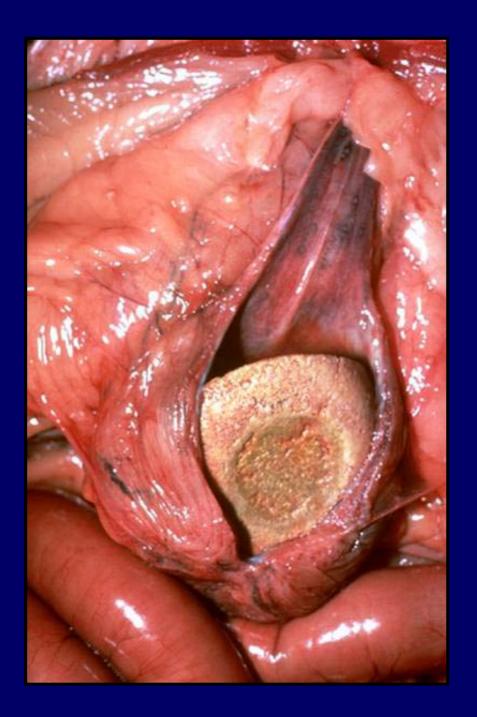




Wether – urethral obstruction by urolith with uroperitoneum

Foal – preputial swelling due to urethral rupture and sterile cellulitis





Bitch – large calculus in urinary bladder

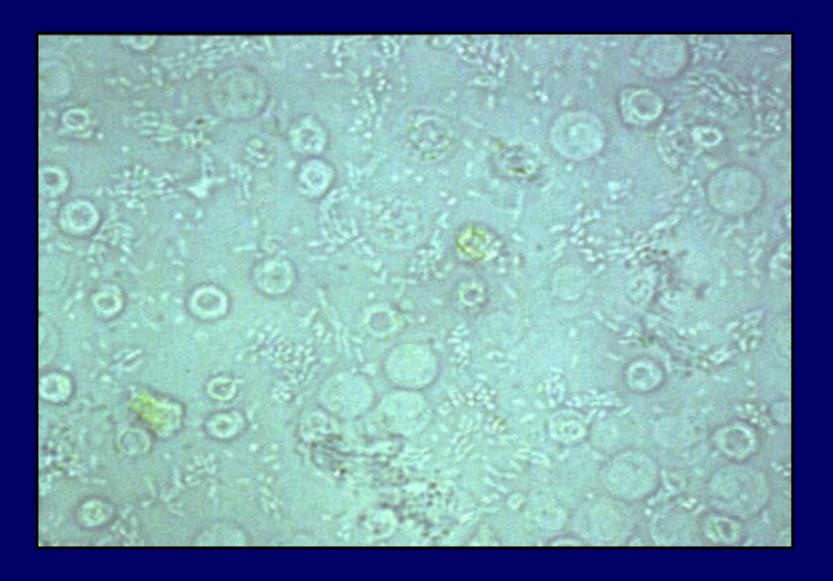
Ram – calculus in urethral process of the penis



Dog – calculus in urethra proximal to the os penis



Dog urine sediment – leukocytes and bacteria



Diabetes mellitus and hyperadrenocorticism predispose to secondary urinary tract infection





Dog – subacute cystitis with urolithiasis

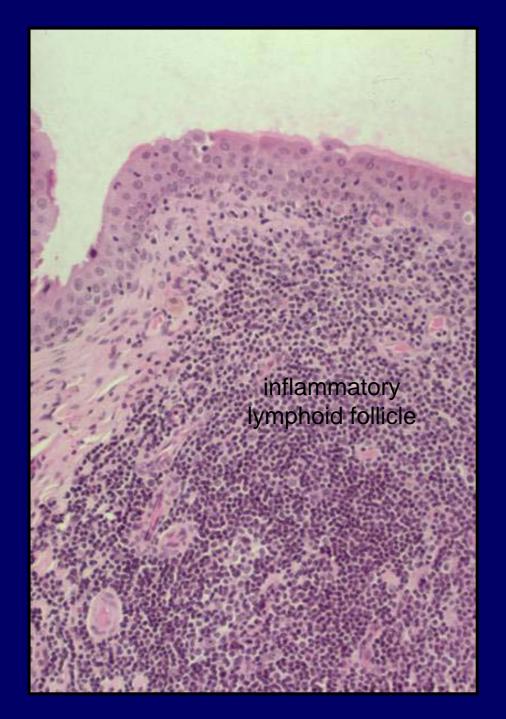




Dog – chronic active cystitis



Dog – chronic active follicular cystitis



Dog – chronic follicular cystitis

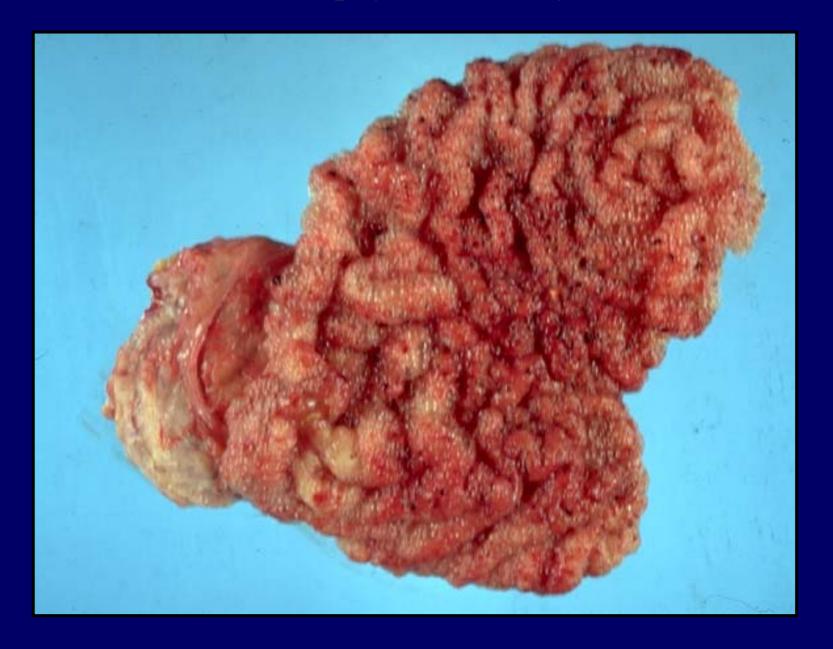
Dog – chronic polypoid cystitis with severe hypertrophy of the smooth muscle of the bladder





Dog – haemorrhagic polypoid cystitis

Cow – emphysematous cystitis



Exfoliated transitional cell carcinoma cells in urine sediment





Transitional cell carcinoma of the urinary bladder in a cow

Cat - peritoneal implantation of transitional cell carcinoma



Mare – squamous cell carcinoma of the urinary bladder



Cow - enzootic haematuria - transitional cell carcinoma of the urinary bladder

