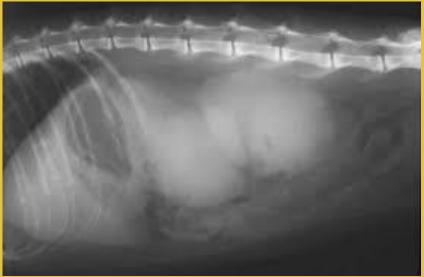
CYSTOGRAPHY

WHAT IS CYSTOGRAPHY ?

• is a **contrast** study of **urinary bladder**.

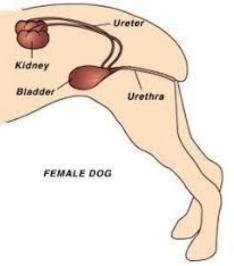
• is obtained when more detailed radiographic evaluation is required.





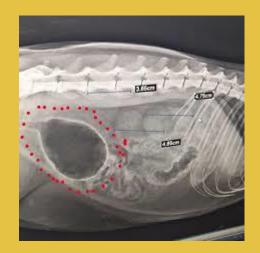
INDICATIONS

- Morphology of urinary bladder
- Wall thickeness of urinary bladder
- The position of the urinary bladder
- Intraluminal or intramural lesions (tumor, calculi or polyps, etc.) in urinary bladder.
- Hematuria
- Pollakiuria (increase in the frequency of the urination)
- Dysuria (painful urination)

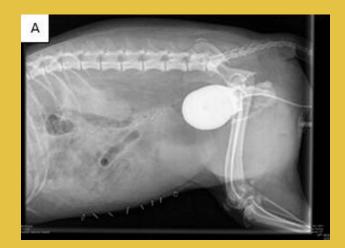


CATEGORIZATION

- Negative Contrast Radiography
 - Positive Contrast Radiography
 - Double Contrast Radiography







NEGATIVE CONTRAST RADIOGRAPHY (PNEUMOCYSTOGRAPHY)

Highlights the bladder wall and morphologic structure of the bladder

• Least preferred technique

TECHNIQUE

- Fast the animal 12-24 hours to exacuate the gastrointestinal tract before the cystography.
- Anaesthesia is required
- Obtain direct radiography in both sides (lateral and dorsoventral)
- Aseptically catheterize and empty the bladder. Also flush and remove any possible of blod clot.
- Infuse the contrast media (soluable gasses like carbondioxide and nitrous oxide)
- Obtain lateral and dorsoventral radiographs.

POSITIVE CONTRAST CYSTOGRAPHY

- Bladder wall integrity
- Bladder localization
- Mural masses

TECHNIQUE

- Fast the animal 12-24 hours to exacuate the gastrointestinal tract before the cystography.
- Anaesthesia is required
- Obtain direct radiography in both sides (lateral and dorsoventral)
- Aseptically catheterize and empty the bladder. Also flush and remove any possible of blod clot.
- Infuse the contrast media (iodinated contrast material).
- Don't forget to palpate the abdominal cavity for avoiding the tension
- Obtain lateral and dorsoventral radiographic views.

DOUBLE CONTRAST RADIOGRAPHY

- Provides the best mucosal details and is optmal for the assessment of urinary calculi and intramural masses.
 - Are the any mucosal defects ?
 - Are there any foreign body in the lumen ?
 - Are there any difference in the wall of the bladder ?
- URINARY CALCULIS CAN BE SEEN !!(difference btw. positive contrast radiography)

TECHNIQUE

- Fast the animal 12-24 hours to exacuate the gastrointestinal tract before the cystography.
- Anaesthesia is required
- Obtain direct radiography in both sides (lateral and dorsoventral)
- Aseptically catheterize and empty the bladder. Also flush and remove any possible of blod clot.
- Infuse the contrast media (iodinated contrast material).
- Then, infuse sufficient gas(negative contrast media) to distend the bladder
- Don't forget to PALPATE !
- Obtain lateral and dorsoventral radiographs



ARE THERE ANY QUESTIONS

