FELINE LOWER URINARY TRACT DISEASE: DIAGNOSIS & MANAGEMENT

PATIENT PRESENTED WITH SUSPECTED FELINE LOWER URINARY TRACT DISEASE (FLUTD)

Conduct physical examination and ask appropriate questions to better determine course of treatment:
- Abnormal urination (eg, pollakiuria, stranguria, hematuria) present?
- Vocalization or painful urination noted?
- Last time patient urinated?

Firm, large, nonexpressible bladder noted on physical examination?

YES
- Proceed with emergency treatment for urethral obstruction
  - Place an IV catheter for pain medication and sedation
  - Obtain blood for renal panel, electrolytes, and minimum database
  - Place a urinary catheter (with the patient under sedation) with retrograde flushing to relieve obstruction
  - Obtain a sterile urine sample for urinalysis and urine culture
  - Monitor postobstructive urine output and adjust IV fluid therapy accordingly

See Initiating Medical Management: Discuss At-Home Environmental Modification, next page

NO
- Obtain blood for renal panel, electrolytes, and minimum database
- Obtain abdominal radiographs ± abdominal ultrasonographic images of urinary tract
  - The most common feline uroliths (ie, calcium oxalate, struvite) are radiopaque and can typically be observed with radiographs alone
  - Less common uroliths (eg, cystine, urate) are radiolucent and require ultrasonography for visualization
- Obtain sterile urine sample for urinalysis and urine culture

See Calculi Present on Imaging?, next page
CALCULI PRESENT ON IMAGING?

- **YES**
  - Consider initiating a dissolution food such as Hill’s Prescription Diet c/d Multicare Stress, nutrition that is enriched with antioxidants and omega-3 fatty acids and has been shown to:
    - Promote appropriate urinary pH
    - Control levels of magnesium, phosphorus, and calcium
  - Repeat imaging in 2 to 4 weeks to monitor dissolution progress
  - Evidence of response to dietary therapy?
    - **YES**
      - Struvite urolithiasis suspected
        - Continue feeding dissolution food
          - Hill’s Prescription Diet c/d Multicare Stress has been shown to dissolve struvite stones in ≥7 days (average, 27 days)
    - **NO**
      - Calcium oxalate urolithiasis suspected
        - Consider surgical removal followed by urolith composition analysis
  - Concurrent UTI present?
    - **YES**
      - Treat with antibiotic therapy based on culture and susceptibility results
    - **NO**
      - Initiate medical management for feline idiopathic cystitis
        - Pain medication
        - Increase water intake
        - Transition to lower urinary care food such as Hill’s Prescription Diet c/d Multicare Stress
          - Shown to lower recurrence of most urinary signs by 89%

- **NO**
  - Evidence of response to dietary therapy?
    - **YES**
      - Continue feeding dissolution food such as Hill’s Prescription Diet c/d Multicare Stress
        - Formulated to promote a urinary environment that reduces risk for both calcium oxalate and struvite crystals
    - **NO**
      - Treat with antibiotic therapy based on culture and susceptibility results
      - Initiate medical management for feline idiopathic cystitis
        - Pain medication
        - Increase water intake
        - Transition to lower urinary care food such as Hill’s Prescription Diet c/d Multicare Stress
          - Shown to lower recurrence of most urinary signs by 89%

Discuss at-home environmental modification
- Following “N+1” litter box rule
- Frequent cleaning of litter boxes
- Decreasing environmental stressors