VANDERBILT UNIVERSITY MEDICAL CENTER

**Guideline:** Adult Burn UTI and Urinary Retention Management

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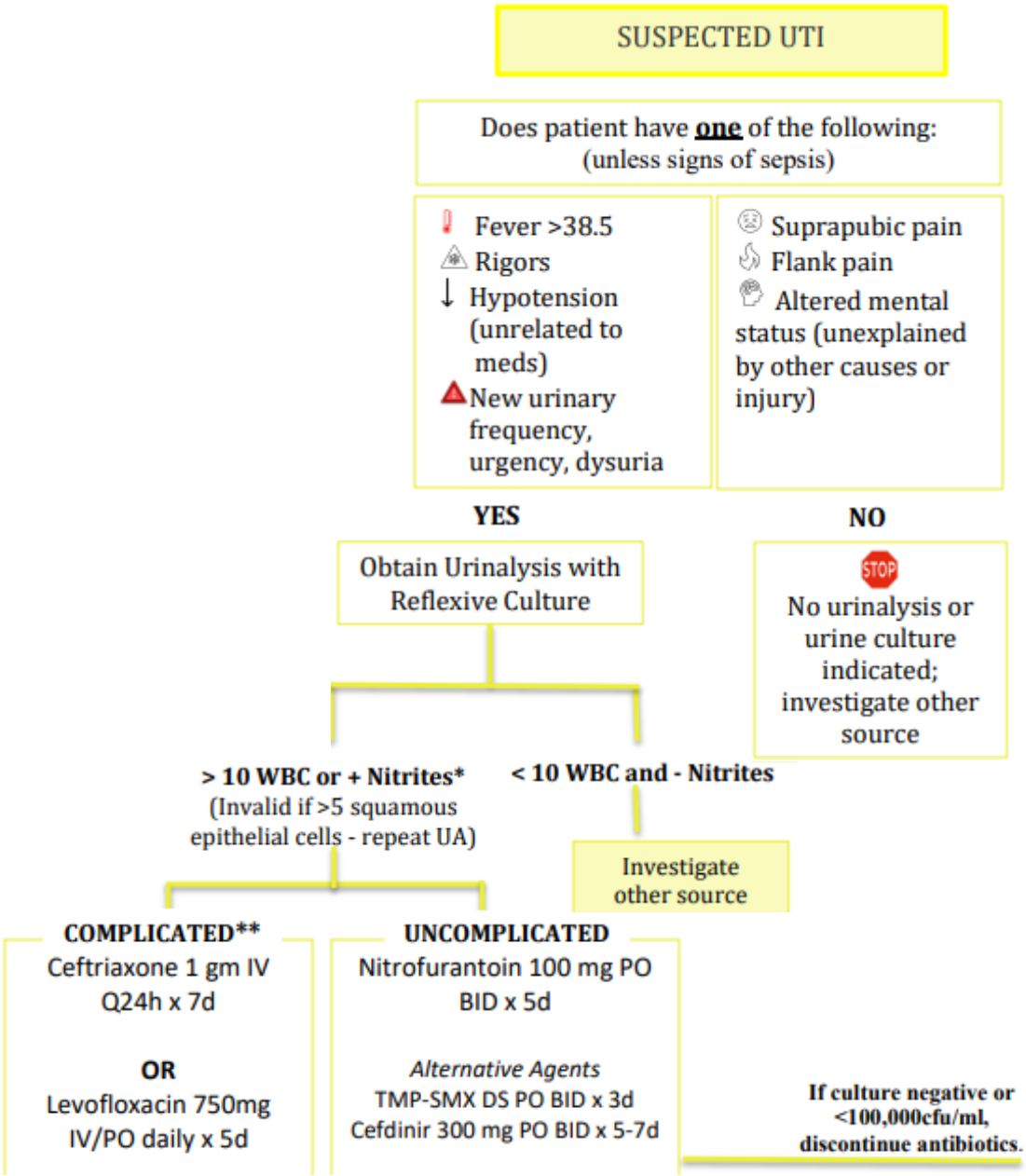
**I. Purpose:**

Provide standardization of treatment for urinary tract infections and urinary retention in the burn population.

**II. Population:**

Adult burn patients symptomatic of urinary tract infection or urinary retention.

**III. Assessment and Treatment:**



**Characteristics of Complicated UTI

| | |
|---|---|
| Male | Ureteral obstruction |
| Neurogenic bladder | Kidney failure |
| Polycystic kidneys | Immunocompromised |
| Suprapubic catheter | Nephrostomy tube |
| Indwelling catheter | Ureteral stent |
| Pregnancy | |

^Includes patients with UTI symptoms whose foley was removed w/in last 48 hours.

**Antibiotic notes**:

- Nitrofurantoin should not be used if CrCl < 30 mL/min.
- Adjust TMP-SMX to SS tablet if CrCl < 30 mL/min. Not for dialysis patients.
- Decrease cefdinir to 300 mg daily if CrCl < 30 mL/min.
- Reduce levofloxacin dose to 750 mg q 48h if CrCl < 50 mL/min.

## IV. Urinary Retention

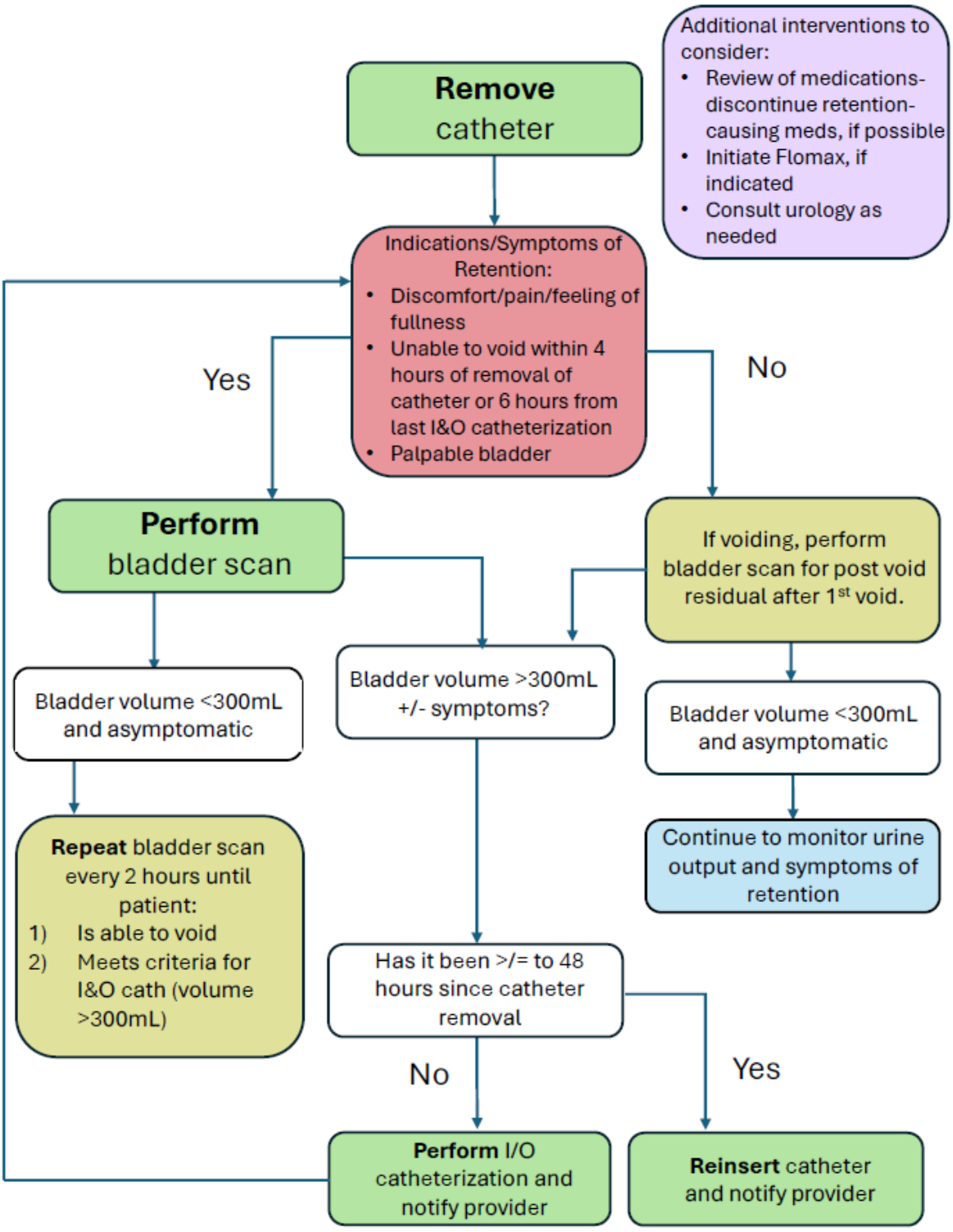
The following pathway was created for management of urinary retention post-catheter removal to provide structure and standardization to decision making around foley re-insertion in the presence of retention.

Nursing Responsibilities

- Once a foley is removed, nursing will assess bladder volume at the 4-hour mark post removal.
- Any bladder volume >300mL will trigger the need for an I&O catheterization if the patient is not able to spontaneously void. Nursing has been instructed to notify a provider if this becomes necessary.
- Bladder volume assessments will continue q6 hours and will be accompanied by an I&O catheterization if the bladder volume trigger is met.
- At the **48-hour** mark, if the patient continues to retain urine and require I&O catheterization, the RN will consult with the provider about replacing the foley catheter.

Provider Responsibilities

- Placing orders for foley removal and replacement, as needed.
- An order for q6 PRN I&O catheterization would also be helpful, if the patient is unable to void spontaneously.
- Please do not allow foleys to be replaced (with the sole rational being urinary retention) before the 48-hour mark has been reached since the previous foley was removed.
- For patients experiencing urinary retention, please complete a brief medication review. Assess any potential retention-causing meds for necessity and consider Flomax or another med for retention.
- Placing urology consults, as needed, for patients who might benefit.


Additional interventions to consider:
• Review of medications- discontinue retention-causing meds, if possible
• Initiate Flomax, if indicated
• Consult urology as needed
Remove catheter
Indications/Symptoms of Retention:
• Discomfort/pain/feeling of fullness
• Unable to void within 4 hours of removal of catheter or 6 hours from last I&O catheterization
• Palpable bladder
Yes
No
Perform bladder scan
If voiding, perform bladder scan for post void residual after 1st void.
Bladder volume <300mL and asymptomatic
Bladder volume >300mL +/- symptoms?
Bladder volume <300mL and asymptomatic
Repeat bladder scan every 2 hours until patient:
1) Is able to void
2) Meets criteria for I&O cath (volume >300mL)
Continue to monitor urine output and symptoms of retention
Has it been >/= to 48 hours since catheter removal
No
Yes
Perform I/O catheterization and notify provider
Reinsert catheter and notify provider

## V. References

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