

## Guidance on Management of rUTIs in Primary Care:

Most women with recurrent UTIs **do not have an underlying structural urologic issue**, and in the majority of cases, management revolves around **behavioral counseling, preventive strategies**, and selective investigations. Below are evidence- and guideline-based suggestions for care:

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### 1. Documentation of Symptomatic Episodes

- Clinicians should document prior positive urine cultures that were associated with symptoms of UTI before diagnosing rUTI.
- Asymptomatic bacteriuria should not be treated in non-pregnant individuals. (Strong Recommendation)

### 2. Testing and Follow-Up

- Avoid post-treatment “test of cure” urine cultures or urinalysis in asymptomatic patients.
- Repeat urine culture is only indicated if symptoms persist following treatment or recur in a short interval.

### 3. Antibiotic Choice

- First-line agents include:
  - **Nitrofurantoin (5 days)**
  - **TMP-SMX (3 days)**
  - Fosfomycin (single dose)
  - These choices should be based on local antibiogram data and patient allergies.

### Symptomatic UTI Episodes Should Include:

- Documented positive culture ( $\geq 10^5$  CFU/mL for clean-catch sample)
- Associated symptoms (e.g., **dysuria**, urgency, suprapubic discomfort)

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## Preventive Strategies for rUTI

### Conservative Measures:

- Encourage hydration ( $\geq 2$ L/day) and prompt voiding (every 3–4 hours, including after intercourse).
- Avoid irritants (wipes, soaps, douches) in the genital area.
- Address and manage constipation.
- In patients with diabetes, consider whether SGLT2 inhibitors (e.g., empagliflozin, dapagliflozin) may be contributing to increased UTI frequency. Discontinuation may be appropriate in select cases with recurrent infections.

## Consider:

- **Topical vaginal estrogen** in peri/post-menopausal patients – supported by strong level 1A evidence and safety data
- **Cranberry supplements** ( $\geq 36$ mg PAC/day; e.g., *Utiva* brand, avoid juice)
- **D-mannose** ( $\geq 2$ g/day) for *E. coli*-associated infections. Mild GI upset can occur. Avoid taking at same time as cranberry as may reduce efficacy.
- **Probiotics** (*Lactobacillus* strains) – limited but promising evidence
- Post-coital antibiotic prophylaxis may be considered for patients with UTIs temporally linked to intercourse. This is a conditional recommendation per AUA guidelines (2022), and should follow a discussion of risks, benefits, and alternatives, with a defined plan for reassessment.
- Daily prophylactic antibiotics are generally discouraged due to risk of long-term adverse effects (e.g., pulmonary fibrosis with nitrofurantoin), resistance, and likelihood of indefinite use without review.

For further reference, consult the AUA and CUA 2022 guidelines on recurrent UTI management.

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## When to Investigate Further:

If your patient meets any of the following criteria, further urologic workup may be appropriate, beginning with a **renal and bladder ultrasound** (with post-void residual measurement):

1. History of urinary tract surgery, stones or trauma
  2. Gross painless hematuria after infection resolution
  3. Voiding symptoms or elevated post-void residuals
  4. Urea-splitting organisms (e.g., *Proteus*, *Morganella morganii*, *Providencia*, *Pseudomonas*, *Yersinia*)
  5. Other unusual organisms (*Candida*, Anaerobes, *Actinomyces*, *Mycobacterium*)
  6. Bacterial persistence despite appropriate antibiotics (Persistence = same organism remains despite appropriate treatment; Recurrence = new symptomatic infection after a symptom-free interval ( $\geq 2$  weeks), may be same or different organism.)
  7. Pneumaturia, fecaluria, with a history of complicated diverticular disease
  8. Repeated pyelonephritis
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## When Symptoms Recur:

- Encourage fluid intake and analgesia. If possible, send a urine culture before starting antibiotics to support targeted treatment.