# Family Medicine Preceptorship Discussion Cases

**Dysuria**

**Learning Objectives:**

* Define and differentiate causes of dysuria.
* Identify patients with likely uncomplicated UTI and best method(s) of treatment.
* Learn laboratory tests that are helpful in differentiating causes of dysuria.
* Recognize subtypes of patients at risk for complicated UTI’s and/or other causes of dysuria.

# Suggested Readings:

Michels TC and Sands JE. Dysuria: Evaluation and Differential Diagnosis in Adults. American Family Physician. 2015; 92 (9): 778-788. <https://www.ncbi.nlm.nih.gov/pubmed/26554471>

Mody L and Juthani-Mehta M. Urinary Tract Infections in Older Women: A Clinical Review. JAMA, 2014; 311(8): 844-54. <https://www.ncbi.nlm.nih.gov/pubmed/24570248>

Bent S, Nallamothu BK, et al, Does this woman have an acute uncomplicated urinary tract infection? JAMA, May 22/29, 2002;287(20):2701-10. [http://jama.ama-](http://jama.ama-assn.org/cgi/content/full/287/20/2701) [assn.org/cgi/content/full/287/20/2701](http://jama.ama-assn.org/cgi/content/full/287/20/2701)

Bergus GR, Dysuria (Chapter 27). In: Essentials of Family Medicine, 6th ed. Philadelphia, PA: Wolters Kluwer/Lippincott, Williams and Wilkins, 2012, 327-336.

**CASE 1:**

A 60 year old woman presents with 1 week of dysuria and denies vaginal or other urinary symptoms.

Question 1: What is your differential diagnosis of her dysuria? How would it change in men?

Question 2: What further evaluation would help you establish a diagnosis?

Question 3: Assuming that her UA indicated infection, what is your first-line treatment?

**Case 2:**

21-year-old woman calls the clinic with 3d h/o urinary frequency and burning on urination. She has increased her water intake without benefit. She is a college student with a new male sexual partner, and uses OCP’s. She denies fever, chills, back pain, or vaginal discharge. She is otherwise healthy. She had a UTI about a year ago.

Question 1: Does this female likely have uncomplicated UTI?

Question 2: Does use of lab (UA / micro) at $37.00 help your differential diagnosis?

Question 3: What are her risk factors for UTI?

Question 4: What are likely organisms causing a UTI?

Question 5: What should you use to treat her?

**Case 3:**

34-year-old female presents with 10 d h/o dysuria, mild urinary frequency. She notes chills and aches, but has not taken her temperature. She is on Depo Provera so her LMP is unknown. She is uncertain about vaginal discharge. She had one UTI 8 years ago. On physical exam, vitals are normal. She has mild erythema of external genitalia, no vaginal discharge or cervicitis, no cervical motion tenderness. No CVAT. UA 1.015/ - LE/ - blood/ - nitrate.

Question 1: Does this woman have an UTI?

Question 2: Does she exhibit any red flags for complicated UTI?

Question 3: What (if any) treatment should be given?

Question 4: Should further testing be done?

Case 4:

78-year-old female nursing home resident has several days of dysuria, worsening incontinence, and inability to sleep well because of nocturia. Her past medical history is significant for HTN, diet-controlled diabetes, high cholesterol, depression. She has had two UTI’s in the past two years. She is afebrile. You will not be able to perform a physical until the end of the day and ask for a urine sample. UA 1.025 / neg LE / neg blood / 1 + glucose / 1+ nitrate. Microscopy shows 20-50 WBC / rare bacteria / 2-5 RBC/ 10-20 epithelial cells/ hpf.

Question 1: Do you need to ask further history or order other lab tests before beginning treatment? If so what?

Question 2: What concerns you regarding UTI in this patient?

Question 3: How would you treat a UTI in this case?

Question 4: Would you treat her if she had positive urine culture with no symptoms?

**CASE 5:**

24 yo male patient presents with pain on urination. He denies penile discharge and has no pelvic, flank, or abdominal pain. No urinary frequency or urgency. No fever or chills. He is otherwise healthy and takes no medications. He is sexually active and has had a couple of female partners in the past year.

Question 1: How could you distinguish the likely anatomic location of pathology based on history?

Question 2: What laboratory tests would you order?

Question 3: What treatment and education would you provide?