






Urinary Tract Infection

Urinary tract infection (UTI) is a common presentation in Australian general practice, comprising about 1% of all problems managed. The presentation of UTIs is highly variable, ranging from mild dysuria to severe sepsis, and masquerades are not uncommon. The approach to investigation and management depends on the patient's age, gender, co-morbidities and presentation. GP registrars are likely to have seen many presentations of UTI in their ED experience, but are often less confident on the approach to investigation, and management of recurrent or complicated infection.

<p>TEACHING AND LEARNING AREAS</p> 	<ul style="list-style-type: none"> • Risk factors for UTI • Clinical manifestations of UTI, including symptoms and signs suggesting a complicated UTI • Differential diagnosis of UTI • Indications for investigation • Approach to management, including complicated and recurrent UTIs • Indications for referral, and local referral pathways • Approach to UTIs in children and the elderly 				
<p>PRE-SESSION ACTIVITIES</p> 	<ul style="list-style-type: none"> • GP registrar to read the Australian Prescriber article (2014) – Assessment and management of lower urinary tract infection in adults 				
<p>TEACHING TIPS AND TRAPS</p> 	<ul style="list-style-type: none"> • Beware chlamydial urethritis presenting with dysuria • Make an abdominal examination part of the routine assessment of patients with probable UTI • Consider prostatitis as a cause of UTI in men • Sterile pyuria requires further investigation for other causes • Use Therapeutic Guidelines to guide choice of appropriate antibiotic • Don't use antibiotics in asymptomatic bacteriuria (unless pregnant or undergoing a urological procedure) - Choosing Wisely recommendation • In children and elderly patients, presentations are often non-specific and misdiagnosis is common • There is limited evidence for cranberries for the prevention of UTIs 				
<p>RESOURCES</p> 	<table border="1"> <tbody> <tr> <td data-bbox="341 1711 437 1800">Read</td> <td data-bbox="437 1711 1497 1800"> <ul style="list-style-type: none"> • AFP article (2016) – Paediatric urinary tract infections: Diagnosis and treatment • AFP article (2010) – Bacterial cystitis in women </td> </tr> <tr> <td data-bbox="341 1800 437 1861">Listen</td> <td data-bbox="437 1800 1497 1861"> <ul style="list-style-type: none"> • ABC Radio National podcast - Busting the cranberry myth for UTIs </td> </tr> </tbody> </table>	Read	<ul style="list-style-type: none"> • AFP article (2016) – Paediatric urinary tract infections: Diagnosis and treatment • AFP article (2010) – Bacterial cystitis in women 	Listen	<ul style="list-style-type: none"> • ABC Radio National podcast - Busting the cranberry myth for UTIs
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<p>FOLLOW UP/ EXTENSION ACTIVITIES</p> 	<ul style="list-style-type: none"> • Ask the GP registrar to undertake the Clinical Reasoning Challenge under exam conditions (7 minutes) and bring along to discuss • GP registrar to contact the local pathology company to get data on local antibiotic resistance patterns for UTIs 				



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Clinical Reasoning Challenge

Francis is a 33 year old childcare worker who presents with a two day history of worsening dysuria and frequency. She has no significant PMHx and is on no medications.

QUESTION 1. What other key features should be sought on history? List the most important features.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

Further enquiry reveals no significant history.

Urinary dipstick is positive for blood, leucocytes and nitrites, and you make a diagnosis of an uncomplicated UTI.

QUESTION 2. What are the most important initial aspects of management? List as many aspects of management as appropriate.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____

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ANSWERS

QUESTION 1

What other key features should be sought on history? List the most important features.

- Other symptoms of possible UTI e.g. haematuria, pelvic or flank pain, fever
- Previous UTIs
- Symptoms of STI e.g. vaginal d/c, dyspareunia
- Sexual history e.g. new partner, UPI, contraception, pregnancy risk
- Allergies

Further enquiry reveals no significant history.

Urinary dipstick is positive for blood, leucocytes and nitrites, and you make a diagnosis of an uncomplicated UTI.

QUESTION 2

What are the most important initial aspects of management? List as many aspects of management as appropriate.

- Education re cause, management and prevention
- Send away formal MSU
- Urinary alkalinisation
- Fluids++
- Empirical antibiotics
- Call for results/safety-netting