

## Possible UTI

**Lower UTI (cystitis)** causes dysuria, frequency, haematuria, suprapubic discomfort, cloudy & offensive urine.

**Upper UTI (pyelonephritis)** tends to make patient systemically unwell, with malaise, fever, loin and/or back pain, vomiting, rigors and potentially septicaemia.

- 1) Record vital signs: **BP, HR, RR, SpO<sub>2</sub>, GCS, Temp, BM**  
Commence Observation Chart and Early Warning Score - Follow ED Escalation Plan
- 2) Perform **urinalysis** (+ **MSU** if positive for leucocytes or nitrites)  
Do **Urinary BHCG** if female (pregnancy will influence antibiotic choice)

**If symptoms are suggestive of a Lower UTI, patient's EWS is <3 and urine dipstick test is suggestive of UTI, transfer to NEMS**

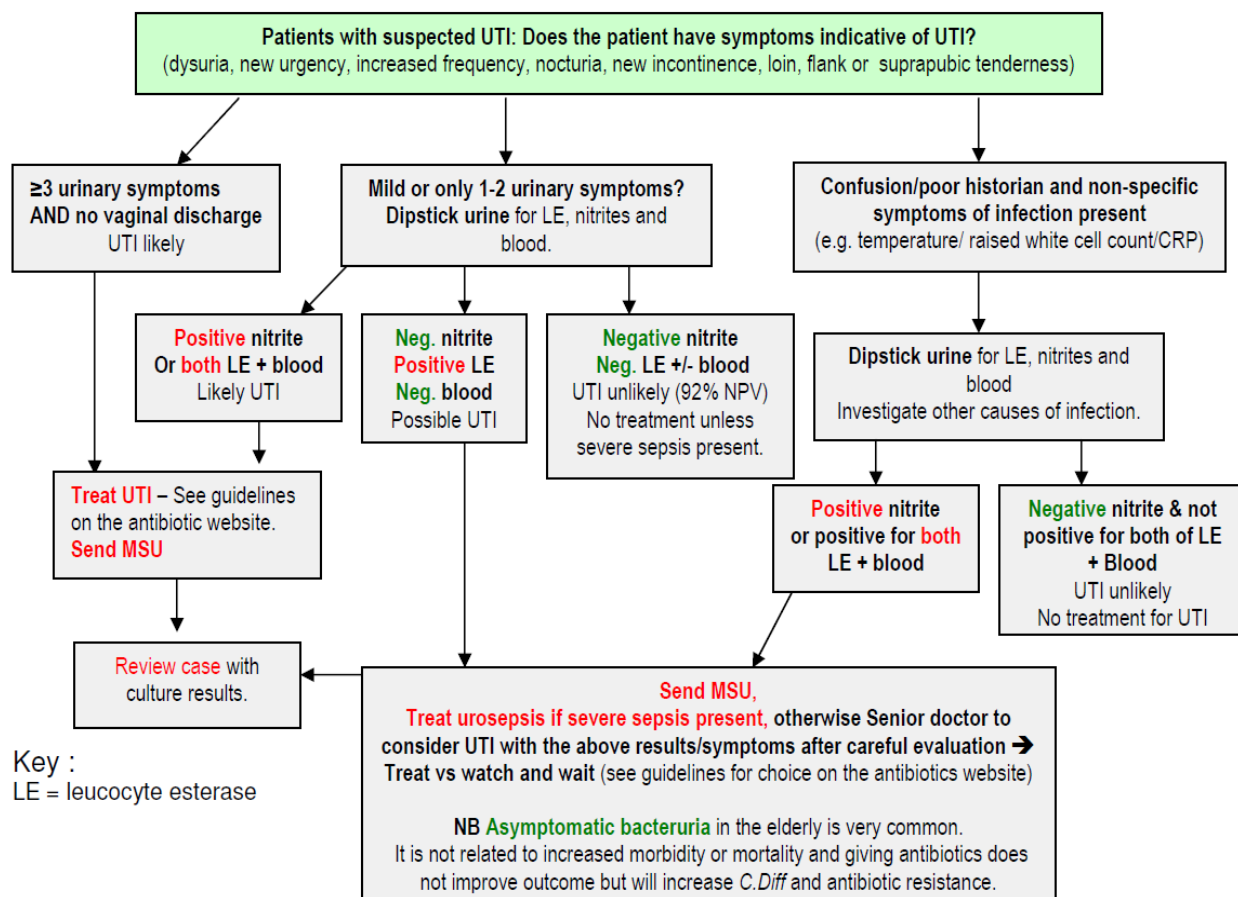
### For all other patients:

- 4) Fully undress, apply a gown and wrist band
- 5) If signs of **severe sepsis** discuss with Senior Doctor - give antibiotics early and consider transfer to resus
- 6) Not all patients need bloods or cannulation
  - Do **bloods** if patient >60yrs and/or known kidney problems: **FBC, UE**
  - If suspected **pyelonephritis** and patient septic or vomiting:
    - **Cannulate** and complete **VIPS**
    - Take **VBG, Blood cultures, Clotting, FBC, UE, LFT**

***Any tasks NOT completed within IAU should be handed over verbally to the team and placed on NURSE ORDERS***

## Diagnosis of UTI - Quick Reference Guide For Adult Patients

- In catheterised patients a positive dipstick urinalysis is a normal result. Avoid unnecessary samples and treatment of bacteriuria. Only sample/treat culture result if signs of systemic infection are present.
- Dipstick urinalysis with nitrite and leucocyte esterase (LE) provides a useful test for the exclusion of UTI - 92% negative predictive value (NPV) if both nitrite and LE negative.
- Urinalysis is slightly less specific with a positive predictive value (PPV) if either one or both are positive of around 40-60% - therefore a positive result should be confirmed by microbiological examination.
- UTI can only be proven bacteriologically in 50% of women with symptoms of UTI, others have inflammation of the urethra (urethral syndrome). Antibiotics do not hasten the clinical response in urethral syndrome.



**Screening for asymptomatic bacteriuria:** Screening of asymptomatic bacteriuria and treatment if positive is indicated at least once in early pregnancy and in those who are to undergo urological procedures where mucosal bleeding is expected e.g. TURP.