Acute Simple Cystitis

General points

- Symptoms confined to the lower urinary tract such as dysuria, frequency, urgency, suprapubic pain.
- Urine culture should be performed on all hospitalized patients before starting antibiotics.
- Review previous urine culture results prior to prescribing.
- Bacterial growth in urine culture in the absence of clinical features of infection (**asymptomatic bacteriuria**) does not warrant antimicrobial treatment. Exceptions to this are pregnancy and patients due to undergo a urological procedure where mucosal injury is anticipated.
- A positive urine dipstick result in an asymptomatic patient is not significant and should not be treated.

Antibiotics (Empiric Therapy)

Nitrofurantoin (Immediate Release Capsules)* 50mg QDS PO

OR

Nitrofurantoin (Prolonged Release Capsules) 100mg BD PO

OR

Cephalexin 500mg BD PO

Alternative: **Trimethoprim** 200mg BD x 3 days ONLY if recent urinary isolate has tested susceptible. Trimethoprim is contraindicated in pregnancy.

***** Nitrofurantoin should not be used in patients with severe renal impairment (CKD stage 4/5, eGFR <30mL/min/1.73m^2 , Creatinine Clearance <30 ml/min) as it does not achieve sufficient levels in the urine to be of therapeutic benefit. There is also an increased risk of toxicity. Nitrofurantoin may be used with caution (as short-course therapy only) if there is a lesser degree of renal impairment (eGFR greater than 30 mL/min) to treat suspected or proven resistant pathogens, when the benefits are expected to outweigh the risks. Caution is advised in older patients with poor fluid intake as renal function may deteriorate in the setting of infection.

In pregnancy nitrofurantoin may also be used but it should be avoided at term.

Nitrofurantoin is also contraindicated in G6PD deficiency.

Duration:

Non-pregnant females =3 days.

Men = 7 days if no concern for prostatic involvement.