Urinary tract infection

Patients with complicated urinary tract infection requiring IV antibiotics can be admitted directly from the emergency department to Hospital in the Home (HITH). See UTI CPG to determine IV versus oral. As with any other HITH admission, this requires a safe home environment and consent. **Children can go straight from ED to HITH.**

HITH (Wallaby) Admission Criteria and Protocol

Wallaby not appropriate

- Haemodynamically unstable
- Not tolerating oral intake/excessive vomiting
- Can be managed with oral antibiotics
- Uncontrolled pain
- Acutely abnormal renal function

→ Admit under appropriate team

Wallaby possible

- Fever and intermittent vomiting are not contraindications
- Neither gentamicin and ceftriaxone usable
- History of ESBL infection
- International patient – needs Wallaby AUM and executive approval. Not for overnight admission

→ Contact HITH fellow in-hours on 52784 or HITH consultant on call after-hours (via switch). Complete EMR HITH referral

Wallaby appropriate

- UTI not manageable with oral antibiotics

→ Contact HITH fellow in-hours on 52784 or HITH consultant on call after-hours (via switch). Complete EMR HITH referral

Prior to family leaving hospital:

- IV cannula appropriately secured and patent
- First dose of gentamicin 7.5mg/kg IV given (6mg/kg for >10yo) (Max 360mg) daily
- Admission accepted by HITH Fellow/Consultant – will have in person review between hours of 7am-9pm (phone consult only after hours)
- HITH order set on EPIC completed:
    - Preselected: Adrenaline 1:1000 (1mg/ml) 10mcg/kg IM PRN
      Sodium chloride flush 0.5-2ml IV PRN
    - Gentamicin 7.5mg/kg IV charted (6mg/kg for >10yo) (max 360mg) daily
    - EMR referral to HITH & HITH bed request

HITH protocol – nursing and medical

Medical care requirements

Daily review (phone/telehealth/home visit)
Script for cephalexin 33mg/kg tds (max 500mg tds) to be ready for first visit (not to be filled until urine culture sensitivities known)

Daily care requirements

IV gentamicin as per Paediatric Injectable Guideline
Therapeutic drug monitoring + UEC (pre third dose if ongoing antibiotics)
Phone support available 24/7 for family to escalate their concerns – phone calls to come to HITH AUM in hours, ED AUM after hours and escalate to HITH consultant on call as required

Potential issues

IV failure – medical team to review to determine if further parenteral therapy required.
If so, consider IM ceftriaxone or arrange IV re-site
Anaphylaxis – administer IM adrenaline and call ambulance (will need allergy referral)
Ultrasound required for boys < 3mo of age prior to discharge
Atypical organism in urine - HITH Fellow to review

Readmission criteria

Not responding to antibiotics after 48 hours (eg ongoing fever)
Increasing abdominal pain, vomiting, poor oral intake
If requires transfer back to hospital, the HITH team will handover care to the appropriate medical team and inform the bed manager
If urgent review required, HITH will discharge and send patient to ED via ambulance

Discharge plan

Discharge when afebrile & clinically improving (generally after 24-48 hours of parenteral therapy)
Urine culture result reviewed
Switch to oral antibiotics to 7-10 day course for pyelonephritis
No outpatient follow-up unless history of recurrent UTI, atypical organisms or abnormal ultrasound