

## **General Paediatrics**

# **Management of Urinary Tract Infections in children**

Effective: July 2017 Review: July 2020

Signs and symptoms						
Infants < 3 months		> 3 months				
Fever Poor feeding Vomiting Offensive urine	Lethargy Haematuria Irritability Jaundice	Fever Abdo/loin pain Lethargy Poor feeding Vomiting	Frequency Dysuria Irritability Haematuria			

Dipstick	Diagnosis	Action	
Leuc +ve Nitrite +ve	UTI – Start antibiotics	Send urine for culture	
Leuc –ve Nitrite +ve	Likely UTI – Start Abx	Send urine for culture	
Leuc +ve Nitrite -ve	Unlikely UTI - Only start Abx if high suspicion of UTI	Send for culture, may indicate infection elsewhere	
Leuc –ve Nitrite –ve	Not UTI – Not for Abx	Not for culture, look for alternative source of infection (except in infants < 3months)	

#### Acute Treatment

- < 3 months: Refer to paediatrics for IV abx
- > 3months with upper UTI: 7-10 Days PO abx. Consider referral/ IV abx
- > 3months with lower UTI: 3 days PO abx (reassess if still unwell at 48 hrs)

## Who to refer

**Acutely:** 

Suspected UTI < 3 months No response to Abx in 48 hrs

Abdominal mass Septicaemia

Routinely:

Poor urine flow

Those requiring imaging (see below)

#### **Imaging**

<6 months	Abx response within 48hr	Atypical	Recurrent
USS acutely	No	Yes	Yes
USS within 6 weeks	Yes	No	No
DMSA (4-6 months)	No	Yes	Yes
MCUG	No	Yes	Yes
6 months to 3 years	Abx response within 48hr	Atypical	Recurrent
USS acutely	No	Yes	No
USS within 6 weeks	No	No	Yes
DMSA (4-6 months)	No	Yes	Yes
MCUG	No	No	No
>3years	Abx response within 48hr	Atypical	Recurrent
USS acutely	No	Yes	No
USS within 6 weeks	No	No	Yes
DMSA (4-6 months)	No	No	Yes
MCUG	No	No	No

#### Check for:

- Recurrent or atypical UTI (definitions below)
- Poor urine flow
- Antenatal renal abnormality
- Family Hx VUR (reflux)
- Constipation
- Dysfunctional voiding
- Large bladder
- Abdominal mass
- Hypertension
- Poor growth

#### **Atypical UTI**

- Poor urine flow
- Septicaemia
- Raised creatinine
- Abdominal / bladder mass
- No response to antibiotics in 48 hrs Infection with non E-Coli organism

#### **Recurrent UTI**

- 2 episodes pyelonephritis
- 1 pyelonephritis and 1 lower UTI
- 3 or more episodes lower UTI

# **Top Tips**

- Do not rule out UTI on the basis of dipstick alone in infants < 3months
- Obtain culture before starting abx
- Identify and treat underlying cause (CONSTIPATION)

## For advice from a Paediatric consultant:

#### **Evelina London:**

Phone: CARS service via Consultant Connect (11:00-19:00 Mon-Fri) Email: general.paediatrics@nhs.net

#### King's College Hospital:

Phone: Hotline via Consultant Connect (08:30-24:00 Mon-Fri, 08:30-20:00 Sat-Sun)

Email: kch-

tr.ambulatorypaediatrics@nhs.net

For routine referrals to general paediatrics:

**Evelina London and King's College** Hospital: via ERS