



History	Examination: check for -	Consider Complications and Alternative diagnoses	Red Flags
<ul style="list-style-type: none"> • Fever • Vomiting • Poor feeding • Lethargy • Irritability • Abdominal pain/loin pain • Dysuria • Urinary Frequency or urgency • Offensive smelling urine • Haematuria <p>See Child with Fever page to assess risk of serious illness</p>	<ul style="list-style-type: none"> • Abdominal tenderness • Loin tenderness (pyelonephritis) • Abdominal mass • Palpable bladder - urinary retention • Exclude balanitis or vulvovaginitis 	<ul style="list-style-type: none"> • Sepsis +/- meningitis (more common in infant under 3 months of age) • Gastroenteritis • Constipation • Appendicitis • GI obstruction 	<ul style="list-style-type: none"> • Child < 3 months • Unwell/septic appearance • Known renal disease • Congenital renal abnormality • Previous renal scarring • Vesico Ureteric Reflux • Abdominal Mass • Poor urine output

Obtaining a Urine

In children over 3 months of age who appear well, if unable to obtain urine sample at time of initial review, send home with advice to return with urine sample within 6 hours

Where suspected UTI in infant under 3 months of age, refer to paediatrics same day (do not delay referral if unable to obtain urine sample)

Urine Dipstick

• Children less than 3 months where there are concerns about UTI should be referred to paediatrics

	3 months to 3 years	>3 years
Both leukocyte esterase and nitrite are negative	Do not start antibiotic treatment Do not send urine for culture unless <ul style="list-style-type: none"> • does not correlate with clinical symptoms • recurrent infection • failure to respond to treatment 	Do not send urine for culture Do not start antibiotic treatment Consider alternative diagnosis
Leukocyte esterase or nitrite, or both are positive	Send a urine sample for culture Start antibiotic treatment	Send urine sample for culture Start antibiotic treatment
If leukocyte esterase is positive and nitrite is negative	Send a urine sample for culture Start antibiotic treatment	Send urine sample for culture Only start antibiotic treatment if clinical significant signs of UTI Consider alternative diagnosis
If leukocyte esterase is negative and nitrite is positive	Send a urine sample for culture Start antibiotic treatment	Ensure sample was tested promptly Send urine sample to the lab for culture Start antibiotic treatment

Green Features	Amber Features	Red Features
<ul style="list-style-type: none"> • Appears well • Age > 3 months • See also febrile child 	<ul style="list-style-type: none"> • Haemodynamically stable • Signs of pyelonephritis (vomiting, fever, loin pain, rigors) • Age >3 months 	<ul style="list-style-type: none"> • Age < 3 months • Unwell/septic appearance • Underlying renal disease • Not able to tolerate antibiotics

Management	Management	Management
<ul style="list-style-type: none"> • Send urine sample for culture • Start antibiotic treatment: <ul style="list-style-type: none"> ◆ Trimethoprim as per BNFC ◆ Cefalexin as per BNFC ◆ Local Policy or as culture results determine • Simple advice <ul style="list-style-type: none"> ◆ Analgesia ◆ Plenty of fluids • Treat any constipation see constipation page • Agree with parents follow up for results 	<ul style="list-style-type: none"> • Send urine sample for culture • Start antibiotic treatment for UTI: <ul style="list-style-type: none"> ◆ Trimethoprim as per BNFC ◆ Cefalexin as per BNFC ◆ Local Policy or as culture results determine • If pyelonephritis likely and systemically well treat with <ul style="list-style-type: none"> ◆ Co-amoxiclav as per BNFC ◆ Cefalexin as per BNFC ◆ Local Policy or as culture results determine 7 days treatment see Antimicrobial-Paediatric-Summary-UKPAS.pdf (uk-pas.co.uk) • Simple advice <ul style="list-style-type: none"> ◆ Analgesia ◆ Plenty of fluids • Safety net advice about when to return 	<ul style="list-style-type: none"> • Send urine sample for culture • Send to local paediatric department for assessment