Table 1

Clinical evaluation following UTI

How old is the child?

All children under 6 months need imaging and we would recommend that they are referred to the paediatric clinic.

Has the child had previous UTIs and if this is the case have they been cystitis/lower or pyelonephritis/upper UTI (e.g. febrile UTI)?

A child warrants renal imaging after three UTIs if they have all been lower tract episodes or after two UTIs if at least one has been an upper tract episode.
The investigations consist of both a renal ultrasound and a DMSA scan and possibly a micturating cystourethrogram (MCUG) in selected cases.
NICE recommends that children with recurrent UTIs should be referred in any case to a paediatric specialist.

Is there a history of antenatal abnormality or family history of vesicoureteric reflux or renal disease?

If this is the case the child should be referred to the paediatric clinic.

Does the child have a poor urine flow?*

If so an urgent referral should be made to the paediatric clinic.

Examination*

- Is there an abdominal mass or a palpable bladder?
- Is the examination of the spine and the lower limbs abnormal suggestive of a spinal lesion?
- Is the child's growth abnormal?
- Is the blood pressure abnormal?

If the answer to any of these questions is Yes, the child needs to be referred to the paediatric clinic.

Did the child take longer than 48 hours to respond to the appropriate antibiotics (i.e. to the antibiotic to which the bacteria were reported as sensitive)?*

Discuss this child on an urgent basis with the paediatricians as an obstructive uropathy needs to be ruled out.

Was the child seriously ill with the UTI (e.g. in shock), has the child had an elevated creatinine?*

These children would have been admitted to hospital and renal investigations would have been started during the acute admission.

Was the UTI caused by an organism other than *E. coli*?*

UTIs caused by organisms other than *E. coli* are more likely to be associated with obstructive uropathy, hence the need for imaging.

*= 'atypical UTI'[2]