



# 2021 exceptional surveillance of urinary tract infections in under 16s: diagnosis and management (NICE guideline CG54) and renal and ureteric stones: assessment and management (NICE guideline NG118)

Surveillance report

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## Surveillance decision

The [NICE guideline on urinary tract infection in under 16s](#) is currently scheduled for an update. As concerns about stents mimicking urinary tract infection (the subject of this exceptional surveillance review) is potentially within the scope of the scheduled update, information will be passed to the update team for their consideration.

We will not update the [NICE guideline on renal and ureteric stones](#) at present. However, concerns about stents mimicking urinary tract infection will be considered in future surveillance reviews of the guideline.

## Rationale for this exceptional surveillance review

In October 2020, the [Healthcare Safety Investigation Branch \(HSIB\) published a report on unplanned delayed removal of ureteric stents](#), which had been prompted by an observation that more patients were needing surgical removal of encrusted stents. The investigation describes a 77-year-old woman who had a ureteric stent inserted after having kidney stones removed. The stent was left in far longer than planned, which resulted in a more extensive operation to remove the encrusted stent.

The report made safety recommendations, which were not directed at NICE guidance and a safety observation which required action by NICE:

Safety observation O/2020/074: The National Institute for Health and Care Excellence guidance for the management of urinary tract infections does not include ureteric stents as a cause of urinary symptoms which could mimic a urinary tract infection (UTI). It may be beneficial for this potential complication to be considered in the next review of this and other clinical practice guidance.

NICE does not have a clinical guideline on UTIs in adults. However, NICE's guidelines on urinary tract infection in under 16s and renal and ureteric stones are relevant.

NICE also has a [guideline on urinary tract infection \(lower\): antimicrobial prescribing](#). This guideline is not relevant to the HSIB report as it focuses on treating a diagnosed UTI with antimicrobials and does not include any recommendations on diagnosis of a UTI or ureteric stents.

## Methods

To determine whether the NICE guidelines needed updating:

- We assessed the HSIB report findings against current recommendations in the NICE guidelines on urinary tract infection in under 16s and renal and ureteric stones and considered the evidence used to develop the 2 guidelines.
- We examined the NICE event tracker for relevant ongoing and published events but found none.
- Literature searches were not needed because the HSIB safety observation was based on an incident, not newly published evidence, and the information we examined was sufficient for decision making.

For further information see [ensuring that published guidelines are current and accurate in developing NICE guidelines: the manual](#).

## Surveillance proposal

### Urinary tract infections in under 16s

Currently the NICE guideline on urinary tract infection in under 16s does not mention ureteric stents as a cause of urinary symptoms which could mimic a urinary tract infection, as the guideline did not have a review question specifically focused on ureteric stents.

The guideline on urinary tract infection in under 16s underwent a [surveillance review in October 2020](#) and is currently scheduled for update focusing on [symptoms and signs to aid clinical diagnosis of urinary tract infection](#). This safety observation is potentially within scope of that proposed update and, as such, will be passed to the team within NICE who are updating the guideline for their consideration. However, it should be noted that the [British Association of Urological Surgeons \(BAUS\) currently has a guide for patients on living with a ureteric stent](#), which highlights that the presence of a stent, along with an underlying kidney problem, can increase the risk of UTIs.

### Renal and ureteric stones

Currently the NICE guideline on renal and ureteric stones makes the following

recommendations covering ureteric stents:

- Recommendation 1.4.1: Do not offer pre-treatment stenting to adults having shockwave lithotripsy (SWL) for ureteric or renal stones.
- Recommendation 1.4.2: Consider pre-treatment stenting for children and young people having SWL for renal staghorn stones.
- Recommendation 1.6.1: Do not routinely offer post-treatment stenting to adults who have had ureteroscopy for ureteric stones less than 20 mm.

When developing the recommendations, the guideline committee considered the evidence for the use of stents before treating renal and ureteric stones in adults with SWL and found no benefits but increased adverse events. Therefore, they agreed that people having SWL did not need pre-treatment stenting. For children, the committee considered limited evidence from 1 non-randomised study showing an overall benefit of pre-treatment stenting for children with renal staghorn stones and agreed that stenting could be considered in some children. No evidence was found for the use of stents after SWL or percutaneous nephrolithotomy (PCNL), or for people with renal stones, or for children and young people. Evidence showed no benefit of routine stenting after ureteroscopy (URS) for adults with ureteric stones less than 20 mm, but increased adverse events, and the committee decided not to recommend stents in this instance. There was no evidence for stones larger than 20 mm, and no recommendation could be made.

The NICE guideline only cautiously recommends use of stents in limited circumstances and, in making their recommendations, the committee were aware that stents have adverse events such as dysuria, frequency and urgency. The committee did not comment that these may overlap with symptoms of UTIs. Similarly, the [BAUS guide for patients on living with a ureteric stent](#) advises that the presence of a stent, along with an underlying kidney problem, can increase the risk of UTIs but it does not mention that a stent may mimic the symptoms of a UTI. As stents can increase the risk of UTIs it does not seem appropriate to only highlight that a stent can mimic a UTI. Therefore, the HSIB report has no impact on the current recommendations and no action is needed from NICE. However, it is important that any safety issue is monitored and assessed so the concerns about stents mimicking UTI have been noted and will be considered by the surveillance team in future reviews of the guideline.

## Equalities

No equalities issues were identified during the surveillance process.

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