

TARGET Recurrent UTI Webinar – Panel Questions

The following document covers questions and answers given during the live webinar “Managing Recurrent UTI and Reviewing Long-Term and Repeat Antibiotic Therapy”.

Find the live webinar recording [here](#).

Answers have been provided by a group of clinical experts. They do not reflect the views of UK Health Security Agency (UKHSA) or the Royal College of General Practitioners (RCGP).

Vaginal Oestrogen

1. Is vaginal oestrogen suitable for pre-menopausal, peri-menopausal, menopausal and post-menopausal women?
 - The [updated NICE guidance](#) discusses the potential benefits of vaginal oestrogen in peri-menopausal, menopausal and post-menopausal women.
 - However, the guidance doesn't mention pre-menopausal women, and I am not aware of any trials that have specifically looked at this population. Therefore, I wouldn't prescribe vaginal oestrogen to any pre-menopausal women, but certainly would prescribe it for peri-menopausal, menopausal and post-menopausal women.
 - It can also be initiated in elderly women who are several years post-menopausal to prevent recurrent UTI.
 - Vaginal oestrogen also has the added benefit of alleviating some of the vaginal symptoms associated with menopause.
2. Is vaginal oestrogen cream more effective than oestrogen tablet pessaries?
 - The supporting evidence is mostly for oestrogen cream.
 - There was a study which found that oestrogen pessaries are not as effective as antibiotics.
 - Trials have used other forms such as vaginal rings or pessaries but not aware of any comparisons between the forms of vaginal oestrogen.
3. What would you do if the twice weekly regime using vaginal oestrogen wasn't making a difference to UTI symptoms? Would you increase the dose or try something else?
 - If the patient is using an adequate dose of vaginal oestrogen, we should consider the next steps.
 - This may involve methenamine, which is included in the [NICE guidance](#) but may not necessarily be listed on local formularies. The potential use of methenamine

can be quite costly across health economies, so it's availability varies from across different systems. Generally, when methenamine has been indicated by a specialist, it can be continued in primary care, depending on the local area.

- Patients should be assessed to determine whether they have a persistent UTI with the same organisms or if they are experiencing recurrent UTIs with different organisms. Persistent infections with the same organism may require a longer course of antibiotics, rather than alternatives such as methenamine. Using antibiotics in patients with recurrent UTIs caused by different organisms may affect the resistance profile of the gut flora, potentially driving a cycle of resistance. For these patients, it is important to consider underlying causes of the UTI and to use methenamine in addition to vaginal oestrogen, rather than antibiotics.
- It is important to note that vaginal oestrogen doesn't work instantly. If sufficient time has been given, you may want to add methenamine and then discontinue it once the symptoms are under control, continuing with the vaginal oestrogen long-term.
- Whilst I am not aware of any specific evidence or guidance about increasing the dose, it may be useful to have a discussion with the patient about the form of oestrogen they are taking (e.g. tablet or cream) as this may be the issue and they may not be using it effectively.

4. Is vaginal oestrogen suitable for patients with a history of oestrogen receptor +ve breast cancer?

There is a section on this in the [NICE guidance](#). It will be based on conversations with the person and shared care decision making.

Methenamine Hippurate

5. Methenamine is red on the formulary and is not recommended by the BNF at the moment. Can it still be prescribed?

- As the [NICE guidance for recurrent UTI](#) has only recently been updated, some medicine's optimisation teams may not yet be aware of the update or may still be in the process of changing the formulary status.
- Please contact your local medicine's optimisation team within the ICB just in case they are not aware of this update to the NICE guidance. Most of the ICBs that are aware have either completed the process to change the formulary status or are currently doing so.
- NHS England are also in discussion with the BNF editorial team to amend the wording, making it clear that methenamine can be used as a prophylaxis for UTIs.

6. How long can methenamine be continued for the prophylaxis of recurrent UTIs?

- [NICE guidance for recurrent UTI](#) states to review methenamine use at 6 months.

- Patients can trial coming off at this point, similar to long-term antibiotics.
- If UTIs recur, treatment can be restarted.

7. If methenamine can be used as a preventive treatment but not for an acute infection, how will this work if this patient has a UTI?

The acute UTI episode should be treated with an antibiotic in line with [NICE acute UTI guidance](#) and then methenamine started as prophylaxis.

8. If a UTI develops whilst a patient is taking methenamine, can an antibiotic be prescribed alongside it?

Yes, it can.

9. Are there any situations where it is necessary to have patients on both methenamine and daily antibiotic prophylaxis?

Someone at this point in preventative treatments should really have had a referral to Urology to see why this is happening.

10. Should antibiotics or methenamine be tried first for recurrent UTI?

If a trigger can be identified, then the patient should have a stat antibiotic dose after the trigger before long-term methenamine, then only daily prophylactic antibiotics if methenamine has not worked.

11. Is methenamine more effective when taken with vitamin C?

Evidence suggests that most people have sufficiently acidic urine and do not need the vitamin C.

12. Are there any studies which look at the use of Nitrofurantoin vs methenamine for recurrent UTI?

- [Harding et al. \(2022\)](#) compared methenamine to different antibiotics, including Nitrofurantoin.
- Also, from an antimicrobial stewardship point of view, always use an antiseptic rather than an antibiotic if effective.

13. Please can you share any evidence Methenamine use in men with recurrent UTI?

[NICE guidance](#) states that methenamine may be effective for use in men with recurrent UTI, however there is no clinical effectiveness evidence for this.

Cranberry products

14. Please can you share any evidence of cranberry use in men with recurrent UTI?

The evidence for cranberry included in this webinar is referenced on the slides uploaded to the TARGET toolkit.

15. What is the evidence for cranberry products? Is there a difference between supplements in tablet form vs juice from the supermarket?

- Juice from the supermarket is very dilute compared to capsules. Generally, clinical trials have shown that cranberry juice isn't effective. However, this can vary between patients, so it is a conversation to have with patients.
- The most active ingredient is D-mannose so, if the patient has not seen any benefit, consider pure D-mannose.

Antibiotic prophylaxis

16. How long can patients be on prophylactic antibiotics if symptoms are improving? Can they continue for longer than 6 months?

- Patients should be reviewed with a view to stop at 6 months.
- Some patients can stop and do not get recurrence or can manage on standby antibiotics.
- Side effect risks may increase with long courses but also some patients take prophylaxis which ends up clearly ineffective.
- The urologist on the NICE committee said that he believed the role of prophylaxis is to allow the bladder to heal. He felt no/little further healing occurs beyond 6 months.
- There is also evidence for prophylaxis that goes to 12 months, but the risk of resistance also increases so there should always be a risk/benefit assessment.

17. The guidance seems to suggest that it is ok to start antibiotic prophylaxis for recurrent UTI without checking for structural abnormalities first. Is that safe?

NICE guidance states that when considering a trial of daily antibiotic prophylaxis to consider "any further investigations (for example, ultrasound) that may be needed to identify an underlying cause".

18. Please can you discuss how to determine antibiotic choice for acute infection with breakthrough UTIs? If the patient is on a certain antibiotic prophylaxis, can they be given the same antibiotic and for what treatment dose?

- You should not use a treatment dose of the same antibiotic that the patient is taking prophylactically.
- The likelihood is that the patient's breakthrough UTI is due to resistance to the prophylactic agent, so giving them a treatment dose of that same antibiotic would not be optimal.
- In terms of what antibiotic to use, taking a mid-stream urine sample for culture would be really useful. This helps identify the organism present, ensuring appropriate treatment, and also allows for a review of the prophylaxis. If the culture shows that the patient is resistant to the drug that they are taking prophylactically, it would be time to consider reviewing their antibiotic prophylaxis regime and consider non-antibiotic alternatives where appropriate.

19. Is there any evidence for the use of prophylaxis for “honeymoon cystitis”?

Advice suggests post-sex voiding and, if this does not work, then single dose stat antibiotic should be used if sex is the identified trigger.

20. Urologist colleagues tend to recommend rotational antibiotic prophylaxis cycling various antibiotic, such as Amoxicillin, Nitrofurantoin followed by Trimethoprim. How effective is this?

- There is very little evidence behind this, and I think the [updated NICE guidance](#) gives a better structure for how to escalate prevention.
- However, for a very few patients this may be of use on an anecdotal basis but there is no good evidence behind this.

21. How often would you suggest to culture urine sample for someone who is on prophylactic antibiotic and alternative prophylaxis 3 monthly period?

- A urine sample should be cultured if a patient has a breakthrough/acute UTI and not for any other reason.
- There is no evidence for rotating.

22. There is a hesitancy to use Nitrofurantoin by some colleagues due to the risk of complications such as lung fibrosis. Is it on the rise due to increased use of this antibiotic?

- There is an increased awareness of the side effects of Nitrofurantoin. Previously, there have not been recommendations to review Nitrofurantoin and so some patients have ended up on the antibiotic for years.
- Although some patients get side effects quickly, for others it is due to the very long durations of prophylaxis.
- Maximising the use of preventative measures, methenamine, and vaginal oestrogens, then using single dose antibiotics where a trigger can be identified, will reduce the number of patients receiving long-term antibiotics where other treatments are effective.

23. Where would you put Fosfomycin for resistant recurrent UTIs?

- It is certainly an option; prophylaxis is given every 10 days.
- Resistance does tend to develop so you do need to know the organisms are sensitive.
- In any case, anyone with recurrent UTI is complex and should always have a sample sent to the lab for culture and sensitivities in the event of a recurrence.

Self-start/single dose antibiotic

24. Can you explain a bit more about self-start antibiotics? How long can we issue them before reviewing? How are these used for patients are known to have triggers for UTIs?

- Self-start antibiotics can support someone who is coming off antibiotic prophylaxis by providing them with essentially a 'rescue pack'.
- Single dose is useful when the patient has a clear history of a known trigger, and this has shown to be effective in these cases. The benefits of this are that it can reduce the burden and amount of antibiotics that patients are taking.
- There was a Chinese study by [Zhong et al. \(2011\)](#) which showed that treatment dose antibiotic at the point of known trigger was as effective as prophylaxis in reducing symptoms of UTIs.
- If we can discuss with patients what their triggers are, and they can identify those, taking the trigger antibiotic at that time can be really effective at managing symptoms accordingly.
- Patients should send in a sample if they need to use their self-start antibiotics. If the UTI turns out to be resistant, then it will need to be reviewed.

25. Does a patient on single dose trigger Nitrofurantoin need 3 monthly LFT monitoring?

It depends on how often they are taking it. There is no specific guidance on this, however 3 monthly would seem appropriate.

26. For trigger antibiotics, would the dose of Nitrofurantoin, for example, be 100mg MR?

- Dose from BNF 50–100 mg once daily, dose to be taken at night, alternatively 100 mg for 1 dose, dose to be taken following exposure to a trigger.
- The dose of each antibiotic is listed in [NICE guidance](#).

Other preventative measures

27. What are your thoughts on using probiotics to support the genitourinary microbiome in preventing or reducing the frequency of recurrent UTI's?

There is very limited evidence to support the use of probiotics. NICE were unable to make a recommendation on it based on the lack of evidence of efficacy.

28. Is there any evidence relating to the use of wet wipes in preventing recurrent UTI?

Not aware of any evidence specifically for the use of wet wipes. However, guidance does discuss wiping front to back after defecation but, as discussed in the presentation, this should be discussed sensitively as it can be upsetting to patients.

Cancer referral

29. Please can you discuss when you would consider referring different patient groups for suspected cancer?

- According to [NICE](#), patients should be referred for suspected bladder cancer if they are aged >45 years and have unexplained visible haematuria without UTI or visual haematuria that persists or recurs after UTI.
- They should also be referred if they are >60 years and have experienced non-visible haematuria and either dysuria or a raised WCC.
- [NICE](#) also recommends non-urgent referral in people >60years with recurrent or persistent unexplained UTI.

30. How much time do you give to say haematuria is resolving?

There is no strict NICE guidance on how long to wait for haematuria to resolve but it is important to follow-up and check it has resolved.

31. Could I please ask advice on non-visible blood as it is recommended in our locality not to dip urine in over 65 years, so may be missed.

- A urine sample should be sent off so this will be tested in the lab.
- The key thing here is that dipsticks should not be used to diagnose UTIs in those >65 years due to the risks of leading to inappropriate treatment of ASB.

32. With regards to non-visible haematuria, some patients have a urine dip which shows negative for bloods and then a urine microscopy shows bloods 6-20. Are these relevant and need further urine dips/MSU to monitor that it's not a persistent microscopic haematuria?

- This is not discussed in the NICE guidance on haematuria of which should be used.
- Locally, we use urine dipsticks to detect persistent nonvisible haematuria (2 out of 3 positive for blood over 1-2 weeks). However, this can also be monitored via the lab instead.

33. If there is dipstick haematuria but no nitrites and leucocytes and the MSU comes back normal. We have treated with a three-day course and in repeat after 48h of completing the course of antibiotics, the urine sample is still positive for dipstick haematuria, but the patient is asymptomatic. Would you refer to a specialist?

The [NICE guidance](#) does state that persistent haematuria after a UTI should be referred so yes, especially if over 45 years of age (would be an urgent suspected cancer referral).

Culture testing

34. I have found that some microbiology departments do not test MSU cultures unless the sample has sufficient leucocytes. How do I get microbiology to culture?

- Labs that perform microscopy frequently use automated systems.
- When no leucocytes or organisms are seen, evidence suggests that samples typically turn out to be culture negative.

- However, this generally excludes groups such as renal, urology or neutropenic.

35. What are your thoughts on negative culture and low-lying infection which is there but actually not picked up in those with chronic UTI?

These patients should be referred to urology for investigation.

Structural abnormalities

36. What are your thoughts for requesting a scan to check for structural abnormalities that may increase the risk of recurrent UTI?

I think a bladder scan to show that there is no retention is the first stage.

Clinical scenarios

37. Regarding scenario 1 (Mei), if there was limited improvement in 3-6 months would you go for a dual therapy of oestrogen + Nitrofurantoin or would you re-treat these based on episodes?

- If there was limited benefit and the patient was still experiencing recurrent UTIs that impacted their daily life, the next stage in [NICE guidance](#) is to use a single dose antibiotic where a trigger can be identified.
- People have different triggers, with sexual intercourse being a common one, but there are others.
- In the [How To Guide](#), we have included a diary so that people can note down their activities and identify their own triggers.
- The patient would receive a one-off dose prophylaxis, which reduces their risk of antimicrobial resistance and side-effects from antibiotics, while still providing the benefits.
- Therefore, this is what I would recommend as the next step, along with continuing to use vaginal oestrogen if it helps with other menopausal symptoms, such as vaginal dryness.

38. Regarding scenario 2 (Robert), should he be tested for diabetes due to nocturia? Would it also be useful to discuss sexual health and consider Chlamydia?

Differential diagnoses and co-morbidities should be considered.

Resources

39. What resources would you recommend for pharmacists to use in discussions with patients who are on long-term antibiotics on repeat?

- [TARGET's 'How to...?' series](#) can be used in the management of patients on long-term and repeated antibiotic use for rUTI, acne and COPD.
- NICE also have some lovely patient infographics on their website under the relevant guidance and resources for the public.

40. Where can we find the leaflets?

You can access the leaflets via the [TARGET toolkit](#). Use the contents page to the right to navigate to the different leaflets, the UTI ones can be found by clicking [here](#).