DE-PRESCRIBING URINARY TRACT INFECTION PROPHYLAXIS V2.0

Comments from the Expert Advisory Group

Antibiotic prophylaxis may have been started to prevent recurrent UTIs in a patient under your care. This is mainly a scenario which affects women. There is no evidence of any additional benefit from such prophylaxis beyond 3-6 months. There is significant evidence of harm. The patient should be advised upon initiation that antibiotic prophylaxis is prescribed for a fixed period of time, that there is a risk of side effects and that this is not intended to be a long-term medication.

Identifying patients for review

- All patients should be reviewed after 3-6 months of antibiotic prophylaxis for recurrent UTIs with a view to stopping them. Documenting and triggering a review date in the patient's record, and on the repeat prescription, is advised to avoid prolonged courses of antibiotics without review.
- Patients who have breakthrough infections with urine cultures confirming resistance to the prophylactic agent, should have their prophylaxis stopped (exposure to antibiotic without benefit) and a clinical review to discuss ongoing management and/or need for referral. A urine culture is recommended for any breakthrough UTI due to the high risk of resistance.
- An UTI Antibiotic Prophylaxis Audit Tool has been created to support GPs/healthcare professionals monitoring their patients on UTI prophylaxis.

Discussing patient concerns about stopping prophylaxis

- Patients may, understandably, feel anxious about returning to suffering recurrent UTIs when prophylaxis is stopped. However after a prolonged period of antibiotic prophylaxis, many patients can stop without a return of symptoms.
- Patients should be given appropriate advice regarding continuation of simple measures to prevent UTI which may help reduce frequency of UTIs (such as increased fluid intake). There is limited evidence for these interventions but, anecdotally, many patients find them effective.
- The risks of long term antibiotics should be discussed with the patient. These include vulvovaginal candida infections or candida balanitis ('thrush'), *Clostridioides difficile* and adverse effects (such as pulmonary fibrosis or peripheral neuropathy with nitrofurantoin).
- The increased likelihood of infection with resistant organisms which may have limited treatment options is also important and should be fully discussed.
- One option to consider (as an interim measure) is to provide 'standby' antibiotics when stopping prophylaxis. This is not generally required.

Recurrence of UTI after stopping antibiotic prophylaxis

- Consider specialist referral for imaging, cystoscopy, post void residual volumes.
- In peri- or post-menopausal women consider the possibility of atrophic vaginitis or vulvovaginal dermatitis as a cause of symptoms similar to UTI.
- Restarting antibiotic prophylaxis should not generally be triggered by a single UTI.
- If recurrent UTIs develop post cessation of prophylaxis (2 or more UTIs in 6 months or 3 or more UTIs in 12 months), appropriate investigations have already been done and shown no abnormality and there are no other concerning symptoms then a further course of prophylaxis may be considered. The ongoing need for antibiotic prophylaxis should be reviewed again after 3 months.
- Chronic pulmonary reactions and chronic active hepatitis, occasionally leading to hepatic necrosis, can occur rarely in patients treated with nitrofurantoin. They are generally associated with long-term therapy (usually after six months). If an ongoing need for antibiotic prophylaxis is required post 6-month exposure to nitrofurantoin, an alternative antibiotic is advised where possible. Seek advice from Microbiologist or ID if necessary.