

Asymptomatic bacteriuria: reducing inappropriate antimicrobial prescribing for aged care facility residents

Antimicrobials are often prescribed inappropriately for treatment and prophylaxis of asymptomatic bacteriuria in Australian aged care facility residents. In 2018, 2% of all prescriptions in aged care were for asymptomatic bacteriuria. Four in five of these prescriptions were for prophylaxis of asymptomatic bacteriuria.

What is asymptomatic bacteriuria?

Asymptomatic bacteriuria is the growth of organisms at specified quantitative counts ($\geq 10^5$ colony-forming units [CFU]/mL or $\geq 10^8$ CFU/L) in an adequate urine specimen, in patients without symptoms consistent with a urinary tract infection (UTI). It is more common in older people and women. It is often diagnosed when urine samples are sent for microscopy and culture for patients who do not have clinical symptoms of UTI or an indication for treatment of asymptomatic bacteriuria.

Does asymptomatic bacteriuria require treatment?

Asymptomatic bacteriuria only requires treatment in very limited circumstances. These include for people undergoing invasive urological procedures and pregnant women. Treatment is not indicated for catheter changes or for orthopaedic procedures.

What are the symptoms of UTI?

UTI symptoms include urinary frequency, urgency, pain or burning when urinating. Urge incontinence and new onset delirium are associated UTI in contrast to other types of incontinence or cognitive impairment.

How can inappropriate antimicrobial prescriptions for asymptomatic bacteriuria be reduced?

Inappropriate prescribing of antimicrobials for asymptomatic bacteriuria can be reduced by:

- Not requesting urine microscopy and culture for older people who do not have UTI symptoms or a clinical indication for

treatment

- Diagnostic stewardship of positive urinary cultures in the laboratory to discourage antimicrobial prescribing in the absence of UTI symptoms
- Correlating urine cultures with organism growth with clinical symptoms prior to prescribing antimicrobials

Assessment and treatment of suspected UTI in older people

[Therapeutic Guidelines Limited](#) has produced a flow chart on assessment and treatment of aged care facility residents with suspected UTI, which is applicable to older people in all healthcare settings. The flow chart is reproduced in Figure 1 (over page).

Key Message

Screening for and treatment of asymptomatic bacteriuria in older people is not recommended.

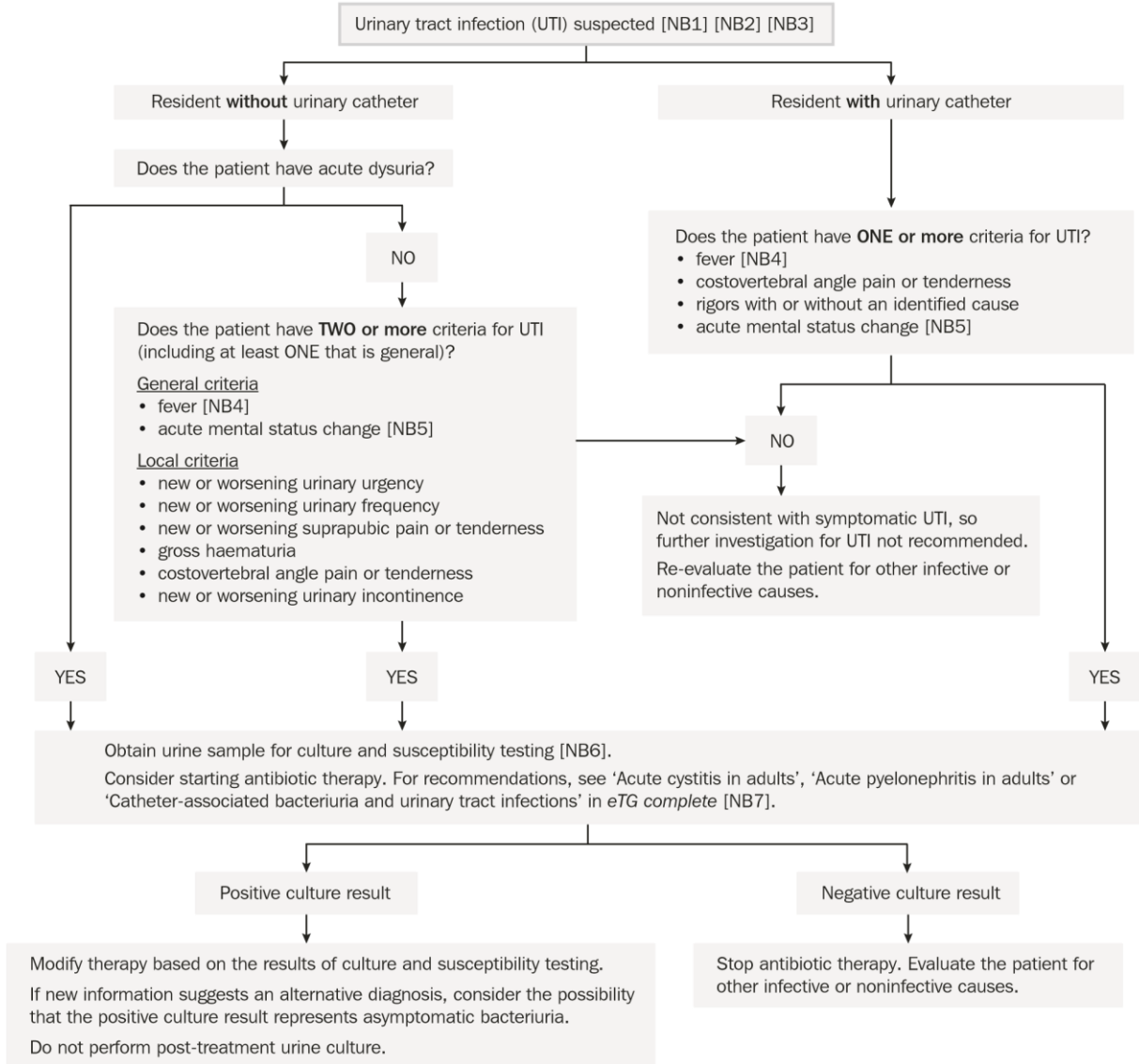
Sources:

- [National Centre for Antimicrobial Stewardship and Australian Commission on Safety and Quality in Health Care. Antimicrobial Prescribing and Infections in Australian Aged Care Homes: Results of the 2018 Aged Care National Antimicrobial Prescribing Survey. Sydney: ACSQHC; 2019](#)
- [eTG Complete by Therapeutic Guidelines](#)
- [Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria: 2019 Update by the Infectious Diseases Society of America](#)

For more information, please visit:

<https://www.safetyandquality.gov.au/our-work/antimicrobial-stewardship> or contact: aura@safetyandquality.gov.au

Assessment and treatment of aged-care facility residents with suspected urinary tract infection



NB1: Do not investigate or treat cloudy or malodorous urine in aged-care facility residents who do not have other signs or symptoms of UTI.
 NB2: Consider whether an alternative diagnosis is likely. Consider both infective (eg pneumonia) and noninfective (eg medication-related adverse events) causes.
 NB3: Establish whether an advance care plan is in place as it may influence assessment and management (eg whether investigations are performed or antibiotics are given).
 NB4: Fever is defined as a temperature higher than 38°C or an increase of more than 1.5°C above baseline temperature.
 NB5: Acute mental status changes include new change in level of consciousness, periods of altered perception, disorganised speech and lethargy.
 NB6: If the resident has an indwelling urinary catheter, see eTG complete for a guide to collecting urine samples in patients with indwelling urinary catheters.
 NB7: The duration of therapy does not need to be modified for this patient group and should always be stated on the prescription.

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