



5 THINGS

CLINICIANS AND CONSUMERS SHOULD QUESTION

Developed by the Australasian College for Emergency Medicine

1

Avoid requesting computed tomography (CT) imaging of kidneys, ureters and bladder (KUB) in otherwise healthy emergency department patients, age <50 years, with a known history of kidney stones, presenting with symptoms and signs consistent with uncomplicated renal colic

Acute flank pain due to suspected renal colic is a common clinical presentation in the emergency department. While a CT-KUB allows a rapid, contrast-free diagnosis of kidney stones, it is a high ionizing-radiation technique. Younger patients with typical renal colic pain that remits spontaneously, or with analgesia, and have no features on history, examination or laboratory investigations that suggest complicated renal stones or a serious alternate diagnosis, can be managed without repeated imaging. Concerning features include fever, features of urinary tract infection, lack of haematuria, ongoing high analgesia requirements, or palpable abdominal mass.

2

Avoid coagulation studies in emergency department patients unless there is a clearly defined specific clinical indication, such as for monitoring of anticoagulants, in patients with suspected severe liver disease, coagulopathy, or in the assessment of snakebite envenomation*

Abnormal coagulation test results in conditions such as acute coronary syndrome can usually be predicted by history, and they rarely affect patient management. Routine coagulation studies in the emergency department therefore represent a substantial added cost, with no benefit to patients. Coagulation studies should be performed based on a history of warfarin or heparin use, or a history of severe liver disease. Please refer to the joint *ACEM/Royal Australian College of Pathologists Guideline on Pathology Testing in the Emergency Department*, for further guidance on appropriate pathology test requesting in emergency departments.

*Point of care testing (POCT) devices are unreliable in assessment of snakebite envenomation



3

Avoid blood cultures in patients who are not systemically septic, have a clear source of infection and in whom a direct specimen for culture (e.g. urine, wound swab, sputum, cerebrospinal fluid, or joint aspirate) is possible

Blood cultures taken in an emergency department do not add more information that would aid clinical management; they also represent a significant cost. The rate of false positives in blood cultures has been reported as approximately 50% and other, more direct tests have been shown to have a markedly higher yield i.e. a diagnostic procedure that often results in a definitive diagnosis. Please refer to the joint ACEM/Royal Australian College of Pathologists *Guideline on Pathology Testing in the Emergency Department*, for further guidance on appropriate pathology test requesting in emergency departments.

4

For emergency department patients approaching end-of-life, ensure clinicians, patients and families have a common understanding of the goals of care

The emergency department is a challenging environment for end-of-life care, presenting ethical and quality of life issues. Research indicates that over 50% of Australians who die an 'anticipated' or 'expected' death, will die in acute hospitals, even though the majority approaching end-of-life wish to die at home. In this context, clinicians, patients and their families should work together to ensure they have a common understanding of the goals of care. Values and wishes around medical treatment should be documented. Monitoring and investigations should be appropriate. Clinicians should advocate for the patient by initiating discussion about end-of-life care with inpatient clinicians and community health professionals. When possible, arrange for end-of-life patients to be transferred to a palliative care facility to avoid admission to acute wards.

5

Don't request imaging of the cervical spine in trauma patients, unless indicated by a validated clinical decision rule

Cervical spine imaging of every trauma patient is costly and results in significant radiation exposure to a large number of patients, very few of whom will have a spinal column injury. Clinical decision rules have been developed that identify patients who can be safely managed without imaging. These rules include the Canadian C-Spine Rule or Nexus Low Risk Criteria. The Canadian C-Spine Rule provides higher specificity and lower imaging requirements, and should be used if possible.

This is a joint recommendation with The Royal Australian and New Zealand College of Radiologists (RANZCR)



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6

**Don't request
computed tomography
(CT) head scans in
patients with a head
injury, unless indicated
by a validated clinical
decision rule**

Most head injuries presenting to emergency departments will be minor and do not require immediate neurosurgical intervention or inpatient care. Mild head injury patients can be risk stratified into 'low' or 'high' risk groups based on the presence or absence of identified clinical risk factors. Current validated clinical decision rules include the Canadian CT Head Rule (for adults) or the PECARN (Paediatric Emergency Care Applied Research Network) Tool (for children). These rules can safely identify patients who can be discharged home, without CT scanning.

This is a joint recommendation with The Royal Australian and New Zealand College of Radiologists (RANZCR)



SUPPORTING EVIDENCE

1.

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5.

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HOW THIS LIST WAS MADE

A Choosing Wisely Working Group of 9 emergency physicians identified an initial list of 10 potential items. All ACEM members were able to provide feedback on these items and suggest other issues for consideration. This feedback informed Working Group refinement of the initial list into 8 recommendations. Evidence reviews were then completed for each recommendation. These evidence reviews, frequency of use in ED, risks/benefit to patient and cost were used as criteria for Working Group member voting in order to determine the final 5 recommendations. These recommendations have been endorsed by ACEM's Council of Advocacy, Practice and Partnerships. Following identification of two common recommendations with the Royal Australian and New Zealand College of Radiologists, it was agreed by both Colleges to jointly present these items.

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About Choosing Wisely Australia

Choosing Wisely Australia® is enabling clinicians, consumers and healthcare stakeholders to start important conversations about tests, treatments and procedures where evidence shows they provide no benefit and in some cases, lead to harm. This initiative is being led by Australia's medical colleges and societies and is facilitated by NPS MedicineWise.

About Australasian College for Emergency Medicine (ACEM)

ACEM is the not-for-profit organisation responsible for training emergency physicians and advancing professional standards in emergency medicine in Australia and New Zealand. As Australasia's peak professional organisation for emergency medicine, ACEM has a significant interest in ensuring the highest standards of medical care for patients are maintained in emergency departments.

About NPS MedicineWise

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