

ROYAL AUSTRALASIAN COLLEGE OF SURGEONS: TESTS, TREATMENTS AND PROCEDURES HEALTH PROFESSIONALS AND CONSUMERS SHOULD QUESTION

RACS is the leading advocate for surgical standards, professionalism and surgical education in Australia and New Zealand. The College is a not-for-profit organisation that represents more than 7000 surgeons and 1300 surgical trainees and International Medical Graduates.

1. Don't perform repair of minimally symptomatic or asymptomatic inguinal hernias without careful consideration, particularly in patients who have significant co-morbidities.

The proportion of patients presenting with inguinal hernias who are suffering significant co-morbidities is increasing. In these populations and in the presence of multiple of co-morbidities, the importance of carefully assessing the risks and benefits of surgical intervention is vital. Studies have shown that adoption of a watch and wait approach does not heighten the risk of the patient developing more severe symptoms. In cases of minimally symptomatic and asymptomatic inguinal hernias, the patient's prognosis and long term health may be improved by non-surgical intervention. Ongoing surgical review is required to ensure that an individual's condition is monitored and that a re-evaluation of their surgical need is made should their symptoms increase in severity.

Supporting Evidence

- Fitzgibbons RJ, Giobbie-Hurder A, Gibbs JO, Dunlop DD, Reda DJ, McCarthy M, et al. Watchful Waiting vs Repair of Inguinal Hernia in Minimally Symptomatic Men. JAMA 2006;295(3):285-92.
- Turaga K, Fitzgibbons RJ, Puri V. Inguinal Hernias: Should We Repair? Surgical Clinics of North America 2008;88(1):127-38.
- Mayer F, Lechner M, Adolf D, Öfner D, Köhler G, Fortelny R, et al. Is the age of >65 years a risk factor for endoscopic treatment of primary inguinal hernia? Analysis of 24,571 patients from the Herniated Registry. Surgical Endoscopy 2016;30(1):296-306.

2. Do not use ultrasound for the further investigation of clinically apparent groin hernias. Ultrasound should not be used as a justification for repair of hernias that are not clinically apparent.

The role of ultrasound in the diagnosis and treatment of groin hernias is limited. When the clinical diagnosis of a groin hernia is uncertain, any sonographic findings should be interpreted in conjunction with clinical judgment and treated conservatively. The diagnostic accuracy of ultrasound is reduced in the absence of any clinically palpable hernia.

Supporting Evidence

- O'Rourke MGE, O'Rourke TR. Inguinal hernia: Aetiology, diagnosis, post-repair pain and compensation. ANZ Journal of Surgery 2012;82(4):201-6.
- Robinson A, Light D, Nice C. Meta-analysis of sonography in the diagnosis of inguinal hernias. Journal of Ultrasound in Medicine 2013;32(2):339-46.

Resources

Read about Guideline on Pathology Testing in the Emergency Department on the Australasian College for Emergency Medicine website

3. Don't transfuse more units of blood than absolutely necessary, noting that many hospitals have developed policies on indications for transfusion with a view to minimisation.

The limited blood resources available within the health system and the lack of evidence to support transfusing more blood than required necessitate the use of appropriate guidelines. Patients should be carefully evaluated (through use of applicable guidelines) when being assessed for blood transfusions and closely monitored.

Supporting Evidence

- Carson JL, Grossman BJ, Kleinman S, Tinmouth AT, et al. Red blood cell transfusion: a clinical practice guideline from the AABB. *Ann Intern Med* 2012;157(1):49-58.
- Goodnough LT, Shieh L, Hadhazy E, Cheng N, Khari P, Maggio P. Improved blood utilization using real-time clinical decision support. *Transfusion* 2014;54(5):1358-65.

4. Do not use endoscopy for investigation in gastric band patients with symptoms of reflux.

The treatment of reflux in gastric band patients should be carefully considered. Endoscopy should not be used without consideration of alternative strategies. Reflux in gastric band patients is often related to the device. It is best managed by removal of fluid, in consultation with a Bariatric Surgeon or other appropriately qualified person.

Supporting evidence

- Burton PR, Brown W, Laurie C, Lee M, Korin A, Anderson M, Hebbard G, O'Brien PE. Outcomes, satiety, and adverse upper gastrointestinal symptoms following laparoscopic adjustable gastric banding. *Obesity Surgery* 2011;21(5):574-81.
- Hamdan K, Somers S, Chand M. Management of late postoperative complications of bariatric surgery. *Br J Surg* 2011;98(10):1345-55.

5. Don't do computed tomography (CT) for the evaluation of suspected appendicitis in children and young adults until after ultrasound has been considered as an option.

Although computed tomography (CT) is accurate in the evaluation of suspected appendicitis in the pediatric population, ultrasound is a good diagnostic tool that will reduce radiation exposure. Ultrasound is the preferred initial consideration for imaging examination in children and young adults. If the results of the ultrasound exam are equivocal, it may be followed by CT.

Supporting evidence

- Wan MJ, et al. Acute appendicitis in young children: cost-effectiveness of US versus CT in diagnosis-a Markov decision analytic model. *Radiology* 2009;250(2):378-86.
- Doria AS, et al. US or CT for diagnosis of appendicitis in children? A meta-analysis. *Radiology* 2006;241(1):83-94.
- Krishnamoorthi R, et al. Effectiveness of a staged US and CT protocol for the diagnosis of pediatric appendicitis: reducing radiation exposure in the age of ALARA. *Radiology* 2011;259(1):231-9.

How was this list created?

RACS and General Surgeons Australia (GSA) collaborated on the development of a list for Choosing Wisely Australia. Each organisation worked closely with key members including the Sustainability in Healthcare Committee and Professional Development and Standards Board (RACS), and Board of Directors (GSA) to develop a list of tests/treatments/procedures for general surgery.

Recommendations from the Royal Australasian College of Surgeons on hernias, blood transfusion, reflux in gastric band patients & appendicitis.