
General Surgery

Eight Things Physicians and Patients Should Question

by
Canadian Association of General Surgeons
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1 **Don't use ultrasound routinely to evaluate clinically evident inguinal hernias.**

The diagnosis of most inguinal hernias can be made with a focused patient history and physical examination. Routine ultrasounds add little value to the diagnosis and management of clinically evident inguinal hernias and can result in treatment delay. These investigations should therefore not be performed where there is a clearly palpable abdominal wall defect and should instead be limited to use in the evaluation of occult inguinal hernias.

2 **Consider a watchful waiting approach in patients with asymptomatic or minimally symptomatic inguinal hernias.**

For minimally symptomatic hernias, surgical repair can prevent potential complications of hernia incarceration and strangulation, but the risk of post-operative complications from infection, hernia recurrence, and chronic inguinal pain approaches the overall risks of incarceration. Watchful waiting for asymptomatic or minimally symptomatic inguinal hernias is a safe option for carefully selected patients and does not preclude patients from undergoing elective repair should discomfort worsen.

3 **Don't use computed tomography (CT) for the evaluation of suspected appendicitis in pediatric patients until an ultrasound has been considered as an option.**

Ultrasound is an accurate and cost-effective imaging modality for initial evaluation of suspected appendicitis in the pediatric population. Evidence shows that the sensitivity and specificity of ultrasound is high with reports of up to 95%, though this may vary based on center experience and capabilities. Where findings on ultrasound exam are equivocal, CT can be considered as part of a step-up investigative approach after discussion with the patient and caregivers about risks of childhood radiation exposure.

4 **Routine preoperative chest x-rays and baseline laboratory studies, such as complete blood count, metabolic panel, or coagulation studies, should not be obtained in patients undergoing low-risk surgery with no significant systemic disease (ASA I or II) and the absence of symptoms.**

Obtaining routine preoperative radiological and laboratory testing offers little value to the perioperative care of asymptomatic patients undergoing low-risk surgery. Evidence suggests that abnormal results within this setting rarely affect management or change clinical outcomes. Instead, a focused history and physical examination should be performed to identify which preoperative investigations are required. Where preoperative testing may add value is in the setting of symptomatic patients or higher risk surgery where significant blood loss and fluid shifts may be expected. A discussion with the patient, anesthesiologists, and surgical team would help guide decision-making in these circumstances.

5 **Avoid colorectal cancer screening tests in asymptomatic patients with a life expectancy of less than 10 years and with no personal or family history of colorectal neoplasia.**

The aim of screening investigations for colorectal cancer, such as fecal immunochemical test (FIT) and colonoscopy, is to reduce deaths through early detection and removal of polyps (a precursor to colon cancer) and early stage colorectal cancers. While colonoscopy is a safe screening modality, increased risks have been associated with advanced age and comorbidities. Life expectancy, presence of symptoms, personal and family history, previous investigations, and patient preference must all be considered in order to determine the safety and appropriateness of screening investigations and surveillance colonoscopy. If colonoscopy is determined to be unsafe or inappropriate, FIT should not be offered as an alternative.

6 **Contralateral prophylactic mastectomy (CPM) is not recommended for average risk women with early stage unilateral breast cancer.**

CPM for early stage breast cancer lacks evidence for survival benefit in average risk women with unilateral breast cancer. CPM can be associated with chronic pain, poor cosmetic outcome, and doubles the risk of post-operative infection and bleeding. Recommended surgical options for treatment for a unilateral early breast cancer in average risk women include lumpectomy and nodal staging or unilateral mastectomy and nodal staging. CPM is recommended for women with unilateral breast cancer and previous Mantle field radiation or a BRCA 1/2 gene mutation. CPM can also be considered by the surgeon on an individual basis for women with unilateral breast cancer and a genetic mutation in the CHEK2/PTEN/p53/PALB2/CDH1 genes, and in women who may have difficulty achieving symmetry after unilateral mastectomy. In all cases, the rationale, risks, and benefits of CPM should be discussed with patients and carefully considered based on each individual patient's particular situation. managed with watchful waiting for up to 2 years after assessment, a choice that should be offered to appropriately selected persons.

7 **Prolonged use of opioid analgesia beyond the immediate postoperative period or other acute pain episode is not recommended.**

Opioid use poses considerable health risks to patients including opioid use disorder, overdose, and side-effects such as psychomotor impairment. While opioid analgesia may be appropriate in select circumstances, prolonged use of opioids beyond the immediate postoperative period and for chronic non-cancer pain is not recommended. Instead, clinicians and patients should consider alternative therapies, such as non-opioid pharmacologic therapy or non-pharmacologic therapies. If opioid analgesia is required, the lowest effective dose, potency, and number of doses required to address the acute pain episode should be prescribed.

8 **Don't routinely open all case cart items unless they are or become necessary to the procedure.**

Operating room waste accounts for approximately 70% of all hospital waste. Not opening case cart items unless they are necessary to the procedure reduces the amount of opened and unused material, thereby reducing surgical waste. This conserves energy by diminishing the need for energy-intensive waste disposal and sterilization methods. Additionally, surgical waste reduction also mitigates the production of pollutants and greenhouse gases that result from the disposal and sterilization of surgical waste.

How the list was created

Practicing general surgeons in Canada were invited to join the Choosing Wisely General Surgery working group. A review of previous Choosing Wisely recommendations was performed, in addition to practice guidelines previously approved by the Canadian Association of General Surgeons (CAGS) Clinical Practice Committee and the American College of Surgeons (ACS). New topics were identified through focus group sessions. These were subjected to a review of the literature and those that were not evidence-based were excluded. A nominal group technique was used to reach consensus. The top 7 recommendations were put forward and has been endorsed by CAGS. These will be submitted for publication to the Canadian Journal of Surgery for distribution to general surgeons in Canada.

Sources

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With 2500 members, CAGS is the voice of the specialty of general surgery across Canada. CAGS supports the quality education, evidence-based research, and steadfast advocacy of general surgery so that its members can provide the best surgical care possible to Canadians.



About Choosing Wisely Canada

Choosing Wisely Canada is a campaign to help physicians and patients engage in conversations about unnecessary tests, treatments and procedures, and to help physicians and patients make smart and effective choices to ensure high-quality care.

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