

# Recommendations from the Society for Healthcare Epidemiology of America and the Society for Cardiovascular Magnetic Resonance

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This is my 42nd article on Choosing Wisely from the American Board of Internal Medicine (ABIM) Foundation. As noted in previous issues of *JLGH*, each specialty group is developing “Five or More Things That Physicians and Patients Should Question.”

All items are developed to encourage discussion between physicians and their patients about which tests and procedures are best in each case. Additional resources are available online at [choosingwisely.org](http://choosingwisely.org).

## RECOMMENDATIONS FROM THE SOCIETY FOR HEALTHCARE EPIDEMIOLOGY OF AMERICA

**1. Antibiotics in patients without convincing evidence of need should not be used. Antibiotics increase the risk of *C. difficile* infection and can lead to other adverse drug events.** Clostridioides (formerly Clostridium) *difficile* (*C. difficile*) infections can be life-threatening illnesses and often occur when antibiotics kill normal bacteria in the intestine. Patients recovering from *C. difficile* infections are three times as likely to have a recurrence if they receive an antibiotic in the following month. Many of these patients are given unnecessary antibiotics — primarily for misdiagnosed urinary tract infections or pneumonia.

**2. Invasive devices (including central venous catheters, endotracheal tubes, and urinary catheters) should be avoided, and if required, use them no longer than necessary. They pose a major risk for infections.** Invasive devices are often necessary for patient support; however, they are a major risk for healthcare-associated infections. We are learning they often can be avoided and, if used, can be quickly removed with the help of clinical reminders and protocols. They should never be used for convenience.

**3. Cultures (e.g., urine, blood, sputum cultures) should not be performed nor should one test for *C. difficile* unless patients have signs or symptoms of infection. Tests can be falsely positive, leading to over diagnosis and overtreatment.** Although important for diagnosing disease when used in patients with appropriate signs or symptoms, these tests often are posi-

tive when an infection is not present. For example, a positive blood culture may represent contamination, a positive urine culture could represent asymptomatic bacteriuria, and a positive test for *C. difficile* could reflect colonization.<sup>1</sup>

**4. Continuous antibiotics should not be used for surgical prophylaxis after the patient has left the operating room.** Prophylactic antibiotics can significantly decrease the risk of surgical site infection; however, they only have benefit if used intraoperatively. There is no evidence that they provide additional benefit if continued after the surgical incision is closed.<sup>2</sup>

**5. Antibiotics should not be continued beyond 72 hours in hospitalized patients unless the patient has clear evidence of infection.** Antibiotics are often started when an infection is suspected but not yet confirmed. After three days, laboratory and radiology information is available and antibiotics should either be de-escalated to a narrow-spectrum antibiotic based on culture results or discontinued if evidence of infection is no longer present. Reducing antibiotic use decreases the risk of infections with *C. difficile* or antibiotic-resistant bacteria.

## RECOMMENDATIONS FROM THE SOCIETY FOR CARDIOVASCULAR MAGNETIC RESONANCE

**1. Stress cardiovascular magnetic resonance (CMR) in the initial evaluation of chest pain patients with low pretest probability of coronary disease should not be performed.** Lower cost stress tests are available for the initial evaluation for low-risk chest pain patients, particularly when they have a normal electrocardiogram and can exercise. Stress CMR can be valuable in evaluating intermediate risk patients with abnormal electrocardiograms or who cannot exercise, or when initial test results are equivocal.<sup>3</sup>

**2. Stress CMR should not be performed as a preoperative assessment in patients scheduled to undergo low-risk, non-cardiac surgery.** Stress testing has not been shown to be useful in patients undergoing low-risk surgery. Therefore, stress CMR

in these patients will not improve outcomes and will increase costs.

**3. Stress CMR should not be performed in patients with acute chest pain and high probability of coronary artery disease.** Stress testing can increase risk and delay therapy in patients with acute chest pain and markers of high risk, such as ST segment elevation and/or positive cardiac enzymes. After initial evaluation and therapy, non-stress CMR may aid in diagnosing ischemic or non-ischemic myocardial injury.

**4. Coronary CMR should not be performed in symptomatic patients with a history of coronary stents.** Coronary stents cause artifacts on CMR that preclude accurate evaluation. Therefore, coronary CMR in these patients will not be diagnostic.

**5. Coronary CMR should not be performed in the initial evaluation of asymptomatic patients.** Coronary CMR has not been well established with the evaluation of coronary atherosclerosis. Coronary CMR is primarily indicated for detecting and characterizing anomalous coronary arteries.<sup>4</sup>

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## Top Tips

### NEW MAMMOGRAM RECOMMENDATION FROM PREVENTIVE SERVICES TASK FORCE

Women should start getting every-other-year mammograms at age 40 instead of waiting until age 50, according to a draft recommendation from the U.S. Preventive Services Task Force.<sup>5</sup> The panel has long said women can choose to start breast cancer screening as young as age 40, with a stronger recommendation that they get exams every two years from ages 50 through 74.

The task force also noted that nearly half of all women have dense breasts, which means mammograms may not work as well, and called for more research into whether additional types of testing would help. The recommendation applies to women at average risk of breast cancer but not those at very high risk due to genetic or other factors.

The latest update – if the draft proposal is finalized – would mark a shift in the task force’s guidelines, although it is not likely to end confusion. Other health groups differ over when and how often to screen.

The American Cancer Society says women ages 45 to 54 should get mammograms every year – but can choose to start at age 40 and then, at age 55, switch to every other year. The American College of Radiology

recommends annual mammograms starting at 40 for women at average risk of breast cancer, but urges that young women get assessed for risks that require even earlier screening.

### BURN CARE CLINICAL PRACTICE GUIDELINES

The severity of an inhalation injury can be diagnosed by a bronchofiberoscopy and chest computed tomography scanning, but no single definitive severity indicator currently exists, according to an article published in *Acute Medicine & Surgery*.<sup>6</sup>

The article’s authors suggest that patients with burns who need initial fluid resuscitation include:

- Adult patients whose burn area is greater than 15% of their total body surface area (TBSA) and children with a burn area of greater than 10% of their TBSA.
- Patients with burn areas that are clearly greater than 20% of their TBSA.

Further, resuscitation should be carried out using a salt-containing fluid infusion based on weight and percentage burn in adult patients with a burn area greater than 20% of their TBSA and pediatric patients with a total burn area greater than 10% of their TBSA.

Additional recommendations include:

- In patients with partial thickness burns, use silver-containing Hydrofiber wound dressings as local therapy within one week post injury.
- In patients with severe burns, begin enteral nutrition as early as possible within 24 hours post injury.
- In patients with electrical burns, if compartment pressure increases or neuropathy or blood flow disorders are present, surgical decompression including fasciotomy should be carried out.
- In patients with chemical injury, use irrigation with water as soon as possible post injury to remove or dilute the attached chemical agent.

Finally, in all patients with burns, deep vein thrombosis can be prevented with mechanical prophylaxis; however, “the indication should be carefully decided” in patients who have lower limb burns.

### ANTICOAGULANTS AND ANTIPLATELETS DURING ACUTE GI BLEEDING

The American College of Gastroenterology and the Canadian Association of Gastroenterology last year published a clinical practice guideline on the management of anticoagulants and antiplatelets during

acute gastrointestinal bleeding (GIB) and the perien-  
doscopic period.<sup>7</sup>

An overview follows; the complete guidelines pro-  
vide recommendations, algorithms, and a dissemina-  
tion tool to address acute GIB and elective endoscopy,  
as well as indicate when to continue, hold, and resume  
antithrombotic agents.

## I. Antithrombotic Agents in the Setting of Acute GIB

### 1. Vitamin K Antagonist Reversal

For hospitalized patients or persons under obser-  
vation with acute GIB who are taking warfarin,  
the guidelines:

- Suggest *against* giving fresh frozen plasma (FFP) or vitamin K.
- Were unable to make a recommendation for or against giving prothrombin complex concentrate (PCC) but suggest administering PCC compared with FFP administration.

### 2. Direct Thrombin Inhibitor Reversal (Dabigatran)

The guidelines suggest *against* giving idarucizumab to hospitalized patients or persons under observa-  
tion with acute GIB who are taking dabigatran.

### 3. Other Agent Reversals for Inpatients or Those Being Observed with GIB

- Rivaroxaban/apixaban: The guidelines suggest *against* giving andexanet alfa.
- Direct oral anticoagulants (DOACs): PCC administration is *not* suggested.
- Antiplatelets: The guidelines suggest *against* giving platelet transfusions.

### 4. Acetylsalicylic Acid (ASA): Holding vs. Continuing

For patients with GIB receiving cardiac ASA for

secondary prevention whose ASA was held, the  
guidelines suggest resumption on the day hemo-  
stasis is endoscopically confirmed.

## II. Anti-Thrombotic Agents in the Setting of Elective Endoscopy

### 1. Anticoagulants: Interrupt or Continue

- For patients on warfarin who are undergoing elective/planned endoscopy GI procedures, continue warfarin rather than a temporary interruption of one to seven days. Bridging anti-coagulation is *not* suggested in patients taking warfarin whose warfarin was withheld in the periprocedural period.
- For patients taking DOACs who are undergoing elective/planned endoscopy GI procedures, temporary interruption of DOACs is suggested.

### 2. Antiplatelets: Interrupt or Continue

- Patients on dual antiplatelet therapy for secondary prevention and undergoing elective endoscopy GI procedures should temporarily interrupt their P2Y<sub>12</sub> receptor inhibitor while continuing ASA.
- No recommendation could be made for or against temporary interruption of the P2Y<sub>12</sub> receptor inhibitor for those taking single antiplatelet therapy with a P2Y<sub>12</sub> receptor inhibitor and undergoing elective endoscopy GI procedures. (Examples of P2Y<sub>12</sub> receptor inhibitors are Plavix®, Effient®, and Brilinta®.)
- Patients on cardiac ASA monotherapy (ASA 81-325 mg/day) for secondary prevention should *not* interrupt ASA monotherapy.

## Museum Houses 19th-Century Marvel

“The Lancaster Medical Heritage Museum Pharmacy [on the cover of this journal] is a 19th-century wooden marvel of early pharmacy décor,” says Kim Jovinelli, executive director of the museum. Acquired from New York, the pharmacy cabinet made its way into the collection via several passionate volunteers and donors and has found a permanent home in the museum lobby. “Interestingly, the cabinet was six inches too large when moved to its new location,” notes Jovinelli, “but with the help of volunteer preservationists, craftsmen, and maintenance workers, the piece was retrofitted to its new home.” The cabinet showcases the large vintage pharmaceutical collection acquired over the museum’s 40-plus-year history. Its colorful jars and unique bottles give a sense of what a 19th-century pharmacy cabinet might look like.

The museum, located at 410 N. Lime Street, Lancaster, is open Tuesday through Saturday, 10:00 a.m. to 3:00 p.m. Winter hours (Monday/Wednesday/Friday, 10:00 a.m. to 3:00 p.m.) begin October 30. Admission is free to LG Health employees with a badge and children under 3, and \$8.00 for all others. Visit the museum at [LancasterMedicalHeritageMuseum.org](http://LancasterMedicalHeritageMuseum.org) for the most current information.

### 3. Resuming Anticoagulants or PGI<sub>2</sub> Receptor Inhibitors Post Endoscopy

No recommendations could be made as to whether interrupted warfarin or DOACs should be resumed on the same day as an elective endoscopy or to wait one to seven days post procedure.

## FECAL INCONTINENCE CLINICAL PRACTICE GUIDELINES

The American Society of Colon and Rectal Surgeons earlier this year published new practice guidelines for the management of fecal incontinence.<sup>8</sup> Class 1 (strong) recommendations are summarized below.

### Evaluation and Risk Assessment

- Obtain a thorough disease history to identify the cause and specific risk factors for incontinence, delineate the duration and severity of the main symptoms, and gather details about secondary issues and associated pathologies.
- In addition, a thorough physical exam is essential. Use validated measures to evaluate how the patient's quality of life has been affected by the nature, severity, and impact of fecal incontinence.
- Consider the use of anorectal physiology testing (manometry, anorectal sensation, volume tolerance, compliance) to delineate the features of dysfunction and guide management. Pudendal nerve terminal motor latency is an option that can be used but is not routinely recommended due to its limited impact in diagnosing and managing fecal incontinence.
- Sphincter defects in the setting of suspected sphincter injury can be performed with endoanal sonography.

### Conservative Management

- First-line therapy for fecal incontinence is the use of conservative measures comprising dietary and medical management.
- Perform endoscopic evaluation in patients who fulfill general screening guidelines or who have specific symptoms (i.e., diarrhea, bleeding, obstruction) that should be further assessed.

### Surgical Interventions

- Correct obvious anatomic defects (e.g., rectovaginal fistula, rectal/hemorrhoidal prolapse, fistula in ano, cloaca-like deformity).
- Offer sphincter repair (sphincteroplasty) in the setting of symptomatic disease and a defined defect of the external anal sphincter.

- In general, avoid repeat anal sphincter reconstruction following failure of overlapping sphincteroplasty – unless other therapeutic modalities are not feasible or have been ineffective.
- The Society does not recommend plication of the external anal sphincter (Parks postanal repair).
- Consider sacral neuromodulation as a first-line surgical option for patients with fecal incontinence, with and without sphincter defects.
- Artificial bowel sphincter implantation remains effective for select patients with severe fecal incontinence.
- Colostomy creation is an excellent surgical option for those whose fecal incontinence has failed other therapies or who do not wish to pursue them.

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