Recommendations from the Commission on Cancer and the Critical Care Societies Collaborative

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This is my 38th 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.

I. RECOMMENDATIONS FROM THE COMMISSION ON CANCER

1. Removal of a breast lump for a suspicious finding should not be performed by surgery unless needle biopsy cannot be done. Needle biopsy may be directed by breast imaging (ultrasound, mammographic, magnetic resonance imaging) or by direct palpation. Studies show that confirmation of breast cancer diagnosis prior to any surgery allows for complete multidisciplinary treatment counseling, reduces the overall number of surgical procedures needed for treatment, improves the cosmetic results of surgery, and avoids mastectomy resulting from multiple surgical procedures.[1]

2. **Initiation of surveillance testing after cancer treatment should not be done without providing the patient a survivorship care plan.** The Institute of Medicine identified the need for a survivorship care plan as a key factor to help cancer patients transition to long-term surveillance care, avoid unnecessary services, and seek appropriate rehabilitative care and emotional support.

This plan includes a summary of the type and stage of the cancer, treatment received, the plan for type and frequency of surveillance testing, and information on resources for rehabilitative and supportive care. Templates for survivorship care plans are available from organizations including Livestrong Foundation, the National Coalition for Cancer Survivorship, and the American Society of Clinical Oncology.

3. Initial treatment should not use surgery without considering presurgical (neoadjuvant) systemic chemotherapy and/or radiation for cancer types and stage where it is effective at improving local cancer control, quality of life, or survival.[2] In many cancer types, presurgical chemotherapy, hormone/endocrine therapy, and/or radiation therapy followed by surgery is better than surgery as the first treatment. This often shrinks the cancer, allowing more limited surgery that maintains organ function, reduces the chances of cancer recurrence and spread, and improves the quality of life.

Disease sites where this should be considered should include:

- Clinical stage IIB and IIIA non-small cell lung cancer
- Clinical T2-4a; any N-positive esophageal cancer
- Clinical T3 and T4 rectal cancer
- Clinical T2, T3, or stage III breast cancer
- Head and neck cancer
- Resectable pancreatic cancer
- Extremity soft tissue sarcomas where resection may affect functional outcomes

4. Major abdominal surgery or thoracic surgery should not be performed without a pathway or standard protocol for postoperative pain control and pneumonia prevention. Coordinated care efforts and established care pathways to control pain and prevent pneumonia reduce the frequency of complications and the length of hospital stay, and should be in place.

5. **Cancer treatment should not be initiated without defining the extent of the cancer (through clinical staging) and discussing with the patient the intent of treatment.** Treatment intent may be diagnostic, curative, maintenance, or palliative. Clinical staging should be performed and documented using information from history and physical examination, relevant biopsy, and appropriate imaging based on the type and stage (extent) of the cancer.

Many patients, especially those with advanced or metastatic cancer, do not have a full understanding of the intent of cancer treatment — they identify that treatment may be curative when in fact it is given

only with palliative intent. They often do not understand the costs, risks, and potential side effects of the treatment.[3]

II. RECOMMENDATIONS FROM THE CRITICAL CARE SOCIETIES COLLABORATIVE

This collaborative comprises the American Association of Critical-Care Nurses, the American College of Chest Physicians, the American Thoracic Society, and the Society of Critical Care Medicine.

1. Diagnostic tests should not be ordered at regular intervals (such as every day), but rather in response to specific clinical questions. Compared with a practice of ordering tests only to help answer clinical questions, or when doing so will affect management, the routine ordering of tests increases health care costs, does not benefit patients, and may in fact harm them. Potential harms include anemia due to unnecessary phlebotomy, which may necessitate risky and costly transfusion, and the aggressive workup of incidental and nonpathological results found on routine studies.[4]

2. Transfusion of red blood cells in hemodynamically stable, non-bleeding ICU patients with a hemoglobin concentration greater than 7 g/dl should not be performed. Most red blood cell transfusions in the ICU are for benign anemia rather than acute bleeding that causes hemodynamic compromise. It is possible that different thresholds may be appropriate in patients with acute coronary syndromes, although most observational studies suggest harms of aggressive transfusion even among such patients.[5]

3. Parenteral nutrition should not be used in adequately nourished critically ill patients within the first seven days of an ICU stay. For patients who are adequately nourished prior to ICU admission, parenteral nutrition initiated within the first seven days of an ICU stay has been associated with harm, or at best no benefit, in terms of survival and length of stay in the ICU. Evidence is mixed regarding the effects of early parenteral nutrition on nosocomial infections.

4. Mechanically ventilated patients without a specific indication and without daily attempts to lighten sedation should not be deeply sedated. Several protocol-based approaches can safely limit deep sedation, including the explicit titration of sedation to the lightest effective level, the preferential administration of analgesic medications prior to initiating anxiolytics, and the performance of daily interruption of sedation in appropriately selected patients receiving continuous sedative infusions.

5. Life support for patients who are at high risk for death or severely impaired functional recovery should not be continued without offering patients and their families the alternative of care focused entirely on comfort. Routinely engaging high-risk patients and their surrogate decision-makers in discussions about the options of foregoing life-sustaining therapies may promote patients' and families' values, improve the quality of dying, and reduce family distress and bereavement.

Even among patients pursuing life-sustaining therapy, initiating palliative care simultaneously with ongoing disease-focused therapy may be beneficial.

Top Tips

HOW TO TALK TO BELIEVERS OF COVID-19 CONSPIRACY THEORIES

Experts on misinformation and psychology interviewed by the Associated Press offer several tips for individuals wondering how to talk to friends or family who believe conspiracy theories about COVID-19. Here is what they suggest:

- *Listen, Don't Preach:* Instead of lecturing, listen and ask questions about how they became interested in the conspiracy theory, where they got their information, and whether they have considered other explanations.
- *Stay Calm:* Remember that some people won't change their minds no matter what you say, and arguing over the proven benefits of mask wearing or vaccines isn't likely to convince them. Some folks will listen to health care providers, but not all.
- *Change the Subject:* Bring up shared experiences and interests to help the person focus on personal connections. If someone dwells on the conspiracy theory, politely say that you would rather talk about something else.

As for increasing your own defenses against conspiracy theories and misinformation about the virus (or any other topic), experts suggest the following:

- *Expand Your Media Diet:* Checking a variety of news sources — including some mainstream local, national, and international outlets — is the best way of staying informed and avoiding rabbit holes of misinformation and conspiracy theories.

- *Check Sources:* Look to see who wrote the content and who is quoted. Are they named? Do they have a position, or experience, that lends credibility to their claims? Are other viewpoints expressed in the article? Also, check the dates: misinformation peddlers often post old photos or news stories and claim they are new.
- *Be Wary of Content That Plays on Emotions:* Misinformation and conspiracy theories often exploit anger, fear, or other emotions. Be cautious of content that features strongly emotional language or seems intended to outrage readers.
- *Verify Extraordinary Claims:* If you read something that makes an incredible claim — one that seems too good, too awful, or too weird to be true — check to see if it is being reported elsewhere.
- *Get Offline:* Experts say healthy habits like exercise, meditation, positive relationships, volunteering, and even hobbies can ease some of the dread and make us more resistant to misinformation and conspiracy theories that exploit our fear or anger.

MONITOR YOUNG CHILDREN FOR THYROID DYSFUNCTION AFTER EXPOSURE TO IODINATED CONTRAST MEDIA

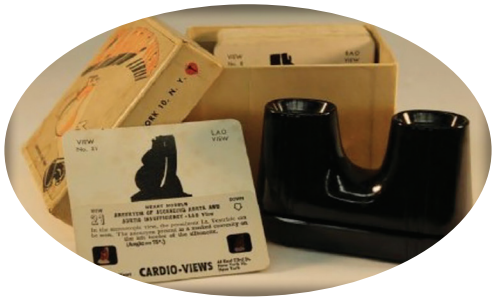
The Food and Drug Administration (FDA) has updated a safety communication regarding the risk of thyroid dysfunction in infants following the use of contrast media containing iodine for x-rays and other medical imaging procedures.

The update was based on the agency's recent review of six newly published studies evaluating this risk, along with five earlier studies of 10 to 2,320 children, ages birth through 3 years, who were exposed to iodine contrast media (ICM) injections. The reported rate of underactive thyroid cases ranges from 1% to 15%. Neonates, particularly those who were preterm, were at high risk; patients with cardiac conditions were at greatest risk. Most reported cases were temporary and did not require treatment.

The FDA concluded, "There is compelling evidence of a significant risk of underactive thyroid or a temporary decrease in thyroid levels in newborns and children through 3 years after exposure to ICM."

Considering the review, the agency approved a new warning to be added to prescribing information for the entire class of ICM injections. The warning describes the risk of underactive thyroid or a temporary decrease in thyroid levels.

Museum Showcases LGH Artifacts Online



The Lancaster Medical Heritage Museum at 410 N. Lime Street is closed for renovation, but its virtual museum continues to grow. More than 20 online exhibits showcase artifacts to help tell the story of medicine throughout history. Alan Peterson, MD, a member of the JLGH *Advisory Editorial Board, also serves on the museum's board. He explains that the new Lime Street location is the former home of Lancaster General Hospital's School of Nursing. The space was "graciously provided" by LGH, according to Dr. Peterson, after the school's move to the Pennsylvania College of Health Sciences. The virtual museum can be found online at LancasterMedicalHeritageMuseum.org. A speaker's bureau and online library of publications are also available.*

Health care professions should consider evaluating function within three weeks, especially in term and preterm neonates and children with cardiac or other conditions. If thyroid dysfunction is detected, treat and monitor thyroid function as clinically needed.

VON WILLEBRAND DISEASE MANAGEMENT GUIDELINE[6]

Von Willebrand disease (VWD) is a common inherited bleeding tendency often characterized by easy bruising, epistaxis, heavy menstrual bleeding, and bleeding after dental and other procedures and surgeries. Given the variability in management of the disease, a multidisciplinary panel developed evidence-based guidelines that offer practical recommendations for this difficult-to-manage disease. Key recommendations of the guidelines include:

- When desmopressin is considered as a future treatment option (typically for type 1 VWD), a baseline trial is suggested to confirm efficacy, especially in patients with Von Willebrand factor (VWF) levels <0.30 IU/mL. The panel highlights that desmopressin is usually ineffective in type 2 VWD, is contraindicated in patients with active cardiovascular disease, and is associated with risk for hyponatremia.

- The panel suggests that VWD does not always present an absolute contraindication to antiplatelet or anticoagulant therapy in patients with cardiovascular disease.
- After major surgery, the suggested goal for factor VIII and VWF activity levels is ≥0.50 IU/mL for at least three days.
- Use of hormonal therapy (combined hormonal contraception or an intrauterine device) or tranexamic acid is suggested over desmopressin in women with heavy menstrual bleeding.
- When neuraxial anesthesia is acceptable during labor, the panel suggests targeting a VWF activity level of 0.5 to 1.5 IU/mL, rather than >1.5 IU/mL, during anesthesia for at least five hours after.

The above recommendations are conditional based on low certainty of evidence, but they do provide helpful recommendations consistent with good clinical practice.

It is important to know that VWD does not always present contraindications to the treatment of major comorbid illnesses, such as cardiovascular disease, and that tranexamic acid can be a useful therapy for patients with minor mucocutaneous bleeding. Guidelines on the diagnosis of VWD were published concurrently.[7]

RECENT RESEARCH STUDIES FOR PRIMARY CARE PHYSICIANS[8]

Editor's note: Of the 20 research studies identified as POEMs (patient-oriented evidence that matters), Dr. Peterson picked his top five to share in this column. He does, however, suggest that readers look at the full article, published in the July 2021 issue of American Family Physician.

1. COVID-19: How common is the presymptomatic transmission of the virus that causes COVID-19? Nearly half of COVID-19 transmissions occur during the presymptomatic phase. This analysis of the temporal pattern of viral shedding found that 44% of secondary cases were infected when the index case was presymptomatic.

2. Does aspirin still provide a net benefit as primary prevention? The balance of benefits and harms is equally weighted, so we should no longer recommend aspirin for primary prevention of cancer or cardiovascular disease. The European Society of Cardiology, the American College of Cardiology, and the American Heart Association agree and no longer recommend aspirin for primary prevention of cardiovascular disease.

3. Is physical therapy or a single glucocorticoid injection more effective for the treatment of osteoarthritis of the knee? The bottom line is that physical therapy is somewhat better than glucocorticoid injection for osteoarthritis of the knee. Studies showing this result are limited by the open-label design. Also, regression to the mean may have contributed to the observed improvements.

A Cochrane review concluded that glucocorticoid injections were effective although primarily in the two to four weeks following an injection, and recent American College of Rheumatology guidelines make strong recommendations in favor of both physical therapy and glucocorticoid injections.

4. Which treatments are effective for patients with an exacerbation of COPD? Short-term antibiotic treatment and short-term systemic corticosteroids are both associated with a faster resolution of COPD symptoms and fewer treatment failures. Other treatment approaches do not help.

5. Is continuity of care associated with decreased mortality? Most studies in this systematic review found that greater primary care continuity was associated with lower all-cause mortality.

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