



CHOOSING WISELY X

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This is my tenth article in this Journal on the “Choosing Wisely” initiative from The Board of Internal Medicine Foundation. As previously noted, each specialty group has or will be developing “Five Things Physicians and Patients Should Question.”

The Choosing Wisely items covered in this article include: Five Things Physicians and Patients Should Question from The American Academy of Dermatology, The American Urological Association, and The American College of Obstetricians and Gynecologists. Finally, following the Choosing Wisely items, I provide five Top Tips.

RECOMMENDATIONS FROM THE AMERICAN ACADEMY OF DERMATOLOGY

1. Oral antifungal therapy for suspected nail fungus should not be prescribed without confirmation of fungal infection. Half of those with suspect nails do not have a fungal infection. Nail dystrophies can look similar, so patients should not be put at risk for side effects of antifungal therapy unless a fungal infection is confirmed.
2. In the evaluation of early, thin melanoma, sentinel lymph node biopsy or other diagnostic tests do not improve survival and should not be performed. Melanoma in Situ, T1a melanoma, or T1b melanoma ≤ 0.5 mm, has a very low risk of cancer spreading to the lymph nodes. Also patients with early, thin melanoma have a 97% five year survival rate which also indicates a low general risk of spreading by metastasis. Base line blood tests and radiographic studies (e.g., chest radiographs, CT scans and PET scans) are not the most accurate tests for the detection of cancer that is spreading, as they can have high false-positive rates. These have only been shown to be beneficial when performed as indicated for suspicious signs and symptoms based on the patient’s history and physical exam.¹
3. Uncomplicated non-melanoma skin cancer < 1 cm in size on the trunk and extremities should not

be treated with Mohs micrographic surgery, which is inappropriate for low risk (< 1 cm) squamous cell and basal cell carcinomas on the trunk and extremities that are microscopically seen to be superficial or non-aggressive. In these areas the potential risks of this surgical procedure may be greater than the potential cancer. Mohs micrographic surgery may be considered for skin cancers appearing on the hands, feet, ankles, shins, nipples or genitals, as they have been shown to have a higher risk of recurrence or require additional surgical considerations.

4. Oral antibiotics should not be used for the treatment of atopic dermatitis unless there is clinical evidence of infection. The finding of *Staphylococcus aureus* (Staph) bacteria on the skin of children and adults with atopic dermatitis is common, but the routine use of oral antibiotics to decrease the amount of bacteria on the skin has not been definitively shown to reduce the signs, symptoms (e.g. redness, itch) or severity of atopic dermatitis. Antibiotics, of course, can also lead to the development of antibiotic resistance. In addition, antibiotics can also cause side effects including allergic and exaggerated immune responses.
5. Topical antibiotics should not be used routinely on surgical wounds. Their use has not been shown to reduce the rate of infection compared to the use of non-antibiotic ointment or no ointment. Also topical antibiotics can aggravate open wounds and hinder normal wound healing, as well as provoke contact dermatitis. Only wounds that show symptoms of infection should receive appropriate antibiotic treatment.²

RECOMMENDATIONS FROM THE AMERICAN UROLOGICAL ASSOCIATION

1. Routine bone scans are unnecessary in men with low-risk prostate cancer (as defined by using commonly accepted categories such as the guidelines

from The American Urological Association and National Comprehensive Cancer Network) since they are unlikely to have disease identified by bone scans. Specifically, bone scans are generally unnecessary for patients with newly diagnosed prostate cancer with a PSA <20.0 ng/mL and a Gleason score of 6 or less, unless the patient's history or clinical examination suggests bony involvement.

2. Testosterone should not be prescribed to men with erectile dysfunction who have normal testosterone levels as it appears to have no significant influence in such patients, though it has been shown to increase libido.³
3. Men with benign prostatic hyperplasia (BPH) do not need a serum creatinine or upper-tract imaging. Where there are only lower urinary tract symptoms of BPH that are not significantly bothersome to the patient, or if the patient does not desire treatment, no further evaluation is recommended. While the patient can often simply tell the provider if the symptoms are bothersome enough to treat, another assessment option is to use a validated questionnaire. If the patient completes the International Prostate Symptom Scale and has a symptom score of 8 or greater, this is considered to be "clinically" bothersome.
4. An isolated elevated PSA should not be treated with antibiotics if the patient is not experiencing other symptoms. It was previously thought that a course of antibiotics might decrease an initially elevated PSA and reduce the need for biopsy, but there is a lack of clinical studies to show that antibiotics actually decrease PSA levels. Further, a decrease in PSA does not indicate an absence of prostate cancer. As for the implications of deferring a biopsy following a decrease in PSA, information from studies is not available.
5. Boys with cryptorchidism do not need ultrasounds, as studies show they have little probability of locating a testis when it cannot be felt on physical examination. Even with a negative ultrasound, there is a significant chance that the testis is present. Ultrasound results are so poor because of the presence of surrounding tissue and bowel gas in the abdomen.⁴ If a physician cannot feel a descended testis, the patient should be referred to a urologist.

RECOMMENDATIONS OF THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

1. Don't schedule inductions of labor or Cesarean deliveries that are elective and not medically indicated until after 39 weeks 0 days gestational age. If done earlier there is an increased risk of learning disabilities and a potential increase in morbidity and mortality. There should be clear medical indications for delivery prior to 39 weeks 0 days based on maternal and/or fetal conditions. A mature fetal lung test in the absence of appropriate clinical criteria is not an indication for delivery.
2. Don't schedule elective, non-medically indicated inductions of labor between 39 weeks 0 days and 41 weeks 0 days unless the cervix is deemed favorable. Inductions of labor when the cervix in unfavorable result in higher Cesarean delivery rates. Practitioners should discuss the risks and benefits with their patients before considering inductions of labor without medical indications.
3. Annual Pap test screening of cervical cytology should not be done routinely in women 30-65 years of age, as it has not been shown to offer advantages over screening at three year intervals. An annual well-woman visit with the health care practitioner is recommended for patients to discuss concerns and problems, and to have appropriate screening with consideration of a pelvic exam.
4. Patients who have had mild cervical dysplasia of less than two years duration should not be treated. Most women with CIN1 (Cervical Intraepithelial Neoplasia) biopsy have a transient HPV infection that will usually clear in less than 12 months and thus does not require treatment in women with average risk.⁵
5. Screening for ovarian cancer in asymptomatic women at average risk is not indicated, as there is only fair evidence that such screening with serum CA-125 level and/or trans-vaginal ultrasound can detect ovarian cancer at an earlier stage than it can be detected without screening. Because of the low prevalence of ovarian cancer and the invasive nature of the interventions required after a positive screening test, the potential harms of screening outweigh the potential benefits.⁶ One of those involved in this U.S. Preventative Services Task Force Reaffirmation Recommendation Statement was Ken Lin, MD, one of the graduates of our Family Practice residency.

TOP TIPS

TYMPANOSTOMY TUBES: RECENT GUIDELINES FROM THE AMERICAN ACADEMY OF OTOLARYNGOLOGY-HEAD AND NECK SURGERY

These guidelines strongly recommend using antibiotic eardrops instead of oral medications to treat acute otorrhea in children with tympanostomy tubes. They also suggest that routine water precautions are not necessary for most children who have tympanostomy tubes in place.

Insertion of tympanostomy tubes is the most common ambulatory surgery performed on children in the United States. The following guidelines from the panel are intended for any clinician who is managing children between ages 6 months to 12 years who have tympanostomy tubes, or are being considered for tympanostomy tubes, for otitis media of any type, in any care setting:

1. Do not insert tympanostomy tubes in children with a single episode of otitis media with effusion (OME) of less than 3 month's duration.
2. Obtain an age-appropriate hearing test if OME persists for 3 months or longer (chronic OME), or prior to surgery when a child becomes a candidate for insertion of tympanostomy tubes.
3. Offer bilateral tympanostomy tubes to children with bilateral OME for 3 months or longer (chronic OME) and documented hearing difficulties.
4. At 3-6 month intervals, reevaluate children with chronic OME who did not receive tympanostomy tubes until the effusion is no longer present, significant hearing loss is detected, or structural abnormalities of the tympanic membrane or middle ear are suspected.
5. Do not insert tympanostomy tubes in children with recurrent acute otitis media (AOM) if they do not have middle ear effusion in either ear at the time of assessment for tube insertion.
6. Offer bilateral tympanostomy tubes to children with recurrent AOM who have unilateral or bilateral middle ear effusion at the time of the assessment for tube candidacy.
7. Determine if a child with recurrent AOM or with OME of any duration is at increased risk for speech, language, or learning problems from otitis media because of baseline sensory, physical, cognitive, or behavioral factors.
8. In the perioperative period, educate caregivers of

children with tympanostomy tubes regarding the expected duration of tube function, recommended follow-up schedule, and detection of complications.

9. Do not encourage routine, prophylactic water precautions (use of ear plugs, headbands; avoidance of swimming or water sports) for children with tympanostomy tubes.

The guideline development group provided the following "options":

1. Clinicians may insert tympanostomy tubes in children with unilateral or bilateral OME for 3 months or longer (chronic OME) and symptoms that are likely attributable to OME including, but not limited to, vestibular problems, poor school performance, behavioral problems, ear discomfort, or reduced quality of life.
2. Clinicians may insert tympanostomy tubes in at-risk children with unilateral or bilateral OME that is unlikely to resolve quickly as reflected by a type B (flat) tympanogram or persistence of effusion for 3 months or longer (chronic OME).⁷

PORTION SIZE AND SERVING SIZE OF FOODS

One of the issues in obesity today is the fact that portion sizes have increased dramatically over the past 20 years. For example, fast-food restaurants are typically offering 2-5 times larger portion sizes than when they were first introduced.⁸ Confusion exists concerning the terminology of portion size and serving size. The serving size definition used for years in the Food Pyramid was different from the serving size on the nutrition labels. Serving size on a food label was not meant for direct comparison with the Food Pyramid's recommended servings.

Portion size is defined as the amount of food an individual eats at one sitting, which varies among individuals. One person may consider one-half cup of ice cream an adequate portion, whereas another may consider 1 ½ cups of ice cream a normal portion.

Two well-known studies have illustrated how strongly the perception of portion size affects food consumption. In the first study, men and women were served lunch for one week.⁹ At each meal, the subjects were presented with one of four portions: 500, 625, 750 or 1000 grams. One-half of the subjects were served the measured food amount on their plate, whereas the other half were given the measured food amount in a bowl and allowed to serve themselves. The participants consumed 30% more energy when presented the largest portion

sizes compared to the smallest portion size, regardless of whether they were given a food amount on their plate or could serve themselves from a serving bowl.

The second study showed how food consumption is controlled by portion size even when the food quality is poor.¹⁰ This study in 158 moviegoers was randomly given a medium (125 gm) or a large (240 gm) container of free popcorn that was either fresh or 14 days old. Moviegoers ate 45% more of the fresh popcorn when it was given in a large container versus when it was given in a small container. Surprisingly, the moviegoers still ate 34% more of the stale popcorn when eating from a large container than a small container.

Compared with 20 years ago, the portion size of a bagel has increased from 3 inches to a 6 inch diameter and increasing the Kcals from 140 to 350. A fast food cheeseburger has increased from 333 Kcals to 590. An average muffin size used to be 1.5 ounces with 210 Kcals and is now 5 ounces with 500 Kcals. A typical soda used to be 6.5 ounces with 85 Kcals and now is 20 ounces with 250 Kcals. There is no wonder we have an obesity problem.

VACCINATION RATES IN L.A. NOW WORSE THAN SOUTHERN SUDAN

Although this is not from a journal article, I found it of great interest. Gary Baum of The Hollywood Reporter investigated childhood illness and vaccination rates around Los Angeles County and discovered some schools in the most affluent L.A. neighborhoods with vaccination rates lower than Southern Sudan.

Vaccination records must be submitted to schools at the time of a child's enrollment or parents can file a "personal belief exemption" (PBE) claim, which absolves them of that responsibility. A bill passed in California this year now requires a physician's signature on all PBEs and immunization records, so those filing them out of convenience will not be able to continue to do so.

Baum found that over the last two years, the number of PBEs filed in L.A. County has increased by 2.2% overall, but some of the most elite preschools have jumped by 57-68% during the same time span. He also found that the schools with the lowest vaccination rates had the highest instances of childhood diseases including measles and whooping cough. California had an outbreak of whooping cough earlier this year that reached epidemic proportions resulting in the death of 3 infants. Measles rates in the area are higher than they have been in over 20 years.

RENAL COLIC: USE ULTRASOUND FIRST

Computed tomography (CT) is the most common imaging modality for diagnosis of kidney stones, but one of its negative features is exposure to radiation. Researchers in this NEJM article from 15 U.S. emergency departments compared outcomes in 2,759 patients with suspected kidney stones randomized to initial imaging with CT, ultrasound performed by a radiologist, or bedside ultrasound performed by trained emergency physicians. Follow-up was performed at the discretion of the treating physicians.¹¹

Only 4% of patients were lost to follow-up. Serious adverse events were similar in all three groups as were readmissions to the emergency room and average pain scores. Although 41% of the bedside-ultrasound group and 27% of the radiology-ultrasound underwent subsequent CT imaging in the emergency room, overall costs remained lower for patients who received the ultrasound first.

The study concluded that the correct strategy is to perform ultrasound first, if imaging is needed at all. We don't know, however, which formal or informal criteria these physicians used in deciding when to perform CT after ultrasound imaging was performed.¹²

ALLERGIES TO RED MEAT

You go into your favorite restaurant and shortly after you have had your favorite steak you develop itching and a rash along with swelling of your tongue and throat. From 2009-2012, the total number of cases of this malady has jumped from a few dozen to thousands. What is the diagnosis?

You have been bitten by a lone star tick sometime in the past. This tick harbors a sugar that humans don't have called alpha-gal. Alpha-gal is found in a "million" meat and other products like milk, gelatin, and even artificial flavorings made from castoreum (which is found in the anal glands of the North American beaver, often listed as a "food additive" on labels). Certain medications can also contain alpha-gal. This sugar is also found in red meat—beef, pork, venison, rabbit, and even some dairy products. Some poultry products such as turkey sausage sometimes contain meat byproducts and can trigger the allergy.

A tick bite from the lone star tick can trigger an immune response in which the body perceives the sugar that the tick transmitted to the victim's blood stream and skin as a foreign substance and makes antibodies to it. This sets up the stage for an allergic

reaction the next time the person eats red meat or the other foods above and encounters that sugar. The symptoms can occur as long as eight hours after eating the meat, rather than immediately.

Interestingly, the culprit is a sugar—a carbohydrate—while most food allergies are caused by proteins. One allergist states that he has seen 200 cases of this reaction on New York's Long Island. This lone star tick, named for Texas, is now found throughout the south

and the eastern half of the United States. Other cases have been reported in Australia, Germany, France, Sweden, Spain, Japan and Korea.

If the reaction is relatively minor, it can be treated with antihistamines. The more severe reactions, such as those with angioneurotic edema, require epinephrine and antihistamines. People with this allergy should carry epinephrine in case they are stricken again. It is not known if this allergy is permanent.

NOTE

Non-physician readers should not use these recommendations as a substitute for consultation with a medical professional. Patients with any specific questions about the items on these lists or their individual situation should consult their physician.

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