

Five Things Physicians and Patients Should Question

1

Avoid ordering a brain CT or brain MRI to evaluate an acute concussion unless there are progressive neurological symptoms, focal neurological findings on exam or there is concern for a skull fracture.

Concussion is a clinical diagnosis. Concussion is not associated with clinically relevant abnormalities on standard neuroimaging with CT or MRI. These studies should be ordered if more severe brain injury is suspected. CT is best utilized for skull fracture and intracranial bleeding, whereas MRI may be ordered for prolonged symptoms, worsening symptoms or other suspected structural pathology.

2

Avoid ordering an abdominal ultrasound examination routinely in athletes with infectious mononucleosis.

Splenic enlargement is common in patients with infectious mononucleosis. The spleen is at increased risk for splenic rupture in the first 3–4 weeks of infection. This has led many clinicians to utilize ultrasound to determine if splenic enlargement is present. However, because individual splenic diameters vary greatly, comparing splenic size to population norms is not a valid method to assess splenic enlargement.

3

Don't prescribe oral contraceptive pills as initial treatment for patients with amenorrhea or menstrual dysfunction due to the female athlete triad (defined as low energy availability with or without disordered eating, menstrual dysfunction and low bone mineral density).

The cause of female athlete triad is an imbalance between energy intake and energy expenditure that leads to menstrual dysfunction (abnormal or loss of periods) and low bone mineral density. Historically, some physicians have used oral contraceptive pills (OCPs) to regulate the menstrual cycle in this disorder. However, the underlying cause for the menstrual dysfunction is energy imbalance. Treatment includes increasing caloric intake and/or decreasing energy expenditure (exercise) to restore normal menses, which can take up to 12 months or longer. Additionally, OCPs do not increase bone density in females affected by the triad. By restoring menses, OCPs can mask energy imbalance and delay appropriate treatment. We recommend a multi-disciplinary approach to treatment that includes a physician, dietitian, mental health professional (when appropriate) and support from coaches, family members and friends.

4

Avoid ordering a knee MRI for a patient with anterior knee pain without mechanical symptoms or effusion unless the patient has not improved following completion of an appropriate functional rehabilitation program.

The most common cause of anterior knee pain is patellofemoral pain syndrome. Magnetic resonance imaging (MRI) is rarely helpful in managing this syndrome. Treatment should focus on a guided exercise program to correct lumbopelvic and lower limb strength and flexibility imbalances. If pain persists, if there is recurrent swelling or if mechanical symptoms such as locking and painful clicking are present, and radiographs are non-diagnostic, an MRI may be useful.

5

Avoid recommending knee arthroscopy as initial management for patients with degenerative meniscal tears and no mechanical symptoms.

Degenerative meniscal tears may respond to non-operative treatments such as exercise to improve muscle strength, endurance and flexibility. Other treatment options include mild analgesics, anti-inflammatory medication, activity modification or corticosteroid injection. If mechanical symptoms such as locking, painful clicking or recurrent swelling are present, or if pain relief is not obtained after a trial of non-operative treatment, arthroscopy may be warranted. If significant osteoarthritis is also present, other surgical options should be considered.

How This List Was Created

The American Medical Society for Sports Medicine (AMSSM) has identified this list of clinical recommendations for the *Choosing Wisely*[®] campaign. The goal was to identify common topics in the practice of sports medicine that, supported by a review of the literature, would lead to significant health benefits and a reduction of common procedures that can be unnecessary or cause harm. For each item, evidence was reviewed from peer-reviewed literature and several sports medicine consensus statements. The list was initially generated and drafted by AMSSM's Quality Measures Subcommittee. It was then edited and approved by AMSSM's Practice and Policy Committee and the Board of Directors.

The American Medical Society for Sports Medicine's disclosure and conflict of interest policy can be found at www.amssm.org.

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About the American Medical Society for Sports Medicine

The American Medical Society for Sports Medicine (AMSSM) is proud to be a partner in the *Choosing Wisely*[®] campaign. Founded in 1991, AMSSM is a multi-disciplinary organization of 2,500 sports medicine physicians dedicated to education, research, advocacy and the care of athletes of all ages. The majority of AMSSM members are primary care physicians with fellowship training and added qualification in sports medicine who then combine their practice of sports medicine with their primary specialty. AMSSM includes members who specialize solely in non-surgical sports medicine and serve as team physicians at the youth level, NCAA, NFL, MLB, NBA, WNBA, MLS and NHL, as well as with the U.S. Olympic team. By nature of their training and experience, sports medicine physicians are ideally suited to provide comprehensive medical care for athletes, sports teams or active individuals who are simply looking to maintain a healthy lifestyle. This partnership with the *Choosing Wisely*[®] campaign aligns with AMSSM's dedication to providing the highest standard of comprehensive care of the athlete, while reducing unnecessary health care costs.

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