

Physical Medicine and Rehabilitation

Six Things Physicians and Patients Should Question

by

Canadian Association of Physical Medicine and Rehabilitation

Last updated: July 2019



1 **Don't treat asymptomatic urinary tract infections in catheterized patients.**

Urinary tract infections (UTIs) in catheterized patients are considered “complicated UTIs”. However, this term can be misleading and prompt clinicians to over treat infections in this population. It is generally recommended that persons with spinal cord injury (SCI) be treated for bacteriuria only if they have symptoms. Specifically, the 2006 Consortium for Spinal Cord Medicine Guidelines for Healthcare Providers require that the following three criteria be met before an individual with SCI is diagnosed with a UTI: (1) significant bacteriuria, (2) pyuria, and (3) signs and symptoms of a UTI.

2 **Don't regularly prescribe bed rest and inactivity following injury and/or illness unless there is scientific evidence that harm will result from activity.**

Bed rest is often used to treat a variety of medical conditions. Prolonged bed rest causes major cardiovascular, respiratory, musculoskeletal and neuropsychological changes. Negative effects include thromboembolism, pneumonia, muscle wasting and physical deconditioning. Many of the negative effects begin within days of confinement, but consequences can last much longer. Specifically, in acute DVT/PE, bed rest has no impact on the risk of developing new PE. Furthermore, in acute low back pain, advice to stay active compared to rest in bed showed benefits in pain relief and functional improvement. Therefore, it is important to limit bed rest as much as possible.

3 **Don't order prescription drugs for pain without considering functional improvement.**

Prescription pain medications have been shown to be effective for pain relief. However, a number of adverse events have been established. While pain reduction is an important outcome measure for patients, they also highly value improved function and quality of life. The addition of prescription pain medications does not always improve functional outcomes, or even pain. There is also a significant risk of long-term addiction. It is imperative that providers work with patients to establish treatment goals, regularly reassess pain and function, and taper or discontinue medications as able or if patients experience harm.

4 **Don't order CT scans for low back pain unless red flags are present.**

Low back pain is one of the leading causes of disability, with a lifetime prevalence of 40%. Routine imaging for low back pain in the absence of red flag symptoms does not change clinical outcomes including pain, function, quality of life and mental health. Red flags include, but are not limited to, severe or progressive neurological deficits or when serious underlying conditions such as osteomyelitis are suspected. In comparing early versus late imaging for non-specific low back pain, there is no difference between groups in terms of overall treatment plan. Imaging can result in “labeling” of patients, exposure to radiation, and unnecessary invasive procedures.

5 **Don't use benzodiazepines for the treatment of agitation in the acute phase of traumatic brain injury after initial stabilization.**

After initial stabilization and when intracranial pressure is controlled, the use of benzodiazepines in the acute phase of traumatic brain injury should be limited to specific medical indications, such as alcohol withdrawal. In animal models of acute TBI, benzodiazepines have been associated with slowed or halted recovery. Moreover, benzodiazepines have adverse effects on cognition, and can cause respiratory depression, paradoxical agitation, and anterograde amnesia. Non-pharmacologic interventions are essential components of the management of agitation after TBI. Beta blockers, such as propranolol, are first line pharmacotherapeutic agents, and anticonvulsants can also be used to decrease agitated behaviours.

6 **Don't recommend carpal tunnel release without electrodiagnostic studies to confirm the diagnosis and severity of nerve entrapment.**

Carpal tunnel release is a highly effective treatment for Carpal Tunnel Syndrome. Clinicians considering referral for surgical management should be aware that good surgical outcome is best correlated with a combination of positive clinical and positive electrodiagnostic studies (EDX). Clinical tests together with EDX have a better association with surgical outcome than either alone. Pre-op nerve conduction study severity can also better predict time to resolution and degree of resolution of symptoms.

How the list was created

The Canadian Association of Physical Medicine and Rehabilitation (CAPM&R) established its Choosing Wisely Canada Top 6 recommendations as a result of a one-year long process. Special Interest Groups (SIGs) were asked to propose relevant items to be considered for Choosing Wisely Canada. As a result, 23 items were refined and distributed to all 385 CAPM&R members for ranking. The CAPM&R executive committee chose a final list of six items from the most highly ranked items on the national survey. At the May 2016 annual CAPM&R meeting, the six items with summary statements and literature reviews were presented to the CAPM&R membership and ultimately approved.

Sources

- 1 Consortium for Spinal Cord Medicine. Bladder management for adults with spinal cord injury: a clinical practice guideline for health-care providers. *J Spinal Cord Med*. 2006; 29(5): 527-573. PMID: [17274492](#).
Hsieh J, McIntyre A, Iruthayarajah J, et al. *Spinal Cord Injury Rehabilitation Evidence: Bladder Management Following Spinal Cord Injury*, version 5.0 [Internet]. 2014 [cited 2016 Sep 26].
Nicolle LE, Bradley S, Colgan R, et al. Infectious Diseases Society of America guidelines for the diagnosis and treatment of asymptomatic bacteriuria in adults. *Clin Infect Dis*. 2005 Mar 1;40(5):643-54. PMID: [15714408](#).
- 2 Adler J, Malone D. Early mobilization in the intensive care unit: a systematic review. *Cardiopulm Phys Ther J*. 2012 Mar;23(1):5-13. PMID: [22807649](#).
Aissaoui N, Martins E, Mouly S, et al. A meta-analysis of bed rest versus early ambulation in the management of pulmonary embolism, deep vein thrombosis, or both. *Int J Cardiol*. 2009 Sep 11;137(1):37-41. PMID: [18691773](#).
Castelino T, Fiore JF Jr, Niculiseanu P, et al. The effect of early mobilization protocols on postoperative outcomes following abdominal and thoracic surgery: A systematic review. *Surgery*. 2016 Apr;159(4):991-1003. PMID: [26804821](#).
Dahm KT, Brurberg KG, Jamtvedt G, et al. Advice to rest in bed versus advice to stay active for acute low-back pain and sciatica. *Cochrane Database Syst Rev*. 2010 Jun 16;(6):CD007612. PMID: [20556780](#).
Stuempfle K, Drury D. The physiological consequences of bed rest. *Journal of Exercise Physiology*. 2007;10(3):32-41.
- 3 Chapman JR, Norvell DC, Hermsmeyer JT, et al. Evaluating common outcomes for measuring treatment success for chronic low back pain. *Spine (Phila Pa 1976)*. 2011 Oct 1;36(21 Suppl):S54-68. PMID: [21952190](#).
Chou R, Huffman LH; American Pain Society; American College of Physicians. Medications for acute and chronic low back pain: a review of the evidence for an American Pain Society/American College of Physicians clinical practice guideline. *Ann Intern Med*. 2007 Oct 2;147(7):505-14. PMID: [17909211](#).
Friedman BW, Dym AA, Davitt M, et al. Naproxen With Cyclobenzaprine, Oxycodone/Acetaminophen, or Placebo for Treating Acute Low Back Pain: A Randomized Clinical Trial. *JAMA*. 2015 Oct 20;314(15):1572-80. PMID: [26501533](#).
Harned M, Sloan P. Safety concerns with long-term opioid use. *Expert Opin Drug Saf*. 2016 Jul;15(7):955-62. PMID: [27070052](#).
Houry D, Baldwin G. Announcing the CDC guideline for prescribing opioids for chronic pain. *J Safety Res*. 2016 Jun;57:83-4. PMID: [27178083](#).
- 4 Chou R, Fu R, Carrino JA, et al. Imaging strategies for low-back pain: systematic review and meta-analysis. *Lancet*. 2009 Feb 7;373(9662):463-72. PMID: [19200918](#).
Gilbert FJ, Grant AM, Gillan MG, et al. Low back pain: influence of early MR imaging or CT on treatment and outcome--multicenter randomized trial. *Radiology*. 2004 May;231(2):343-51. PMID: [15031430](#).
Jarvik JG, Gold LS, Comstock BA, et al. Association of early imaging for back pain with clinical outcomes in older adults. *JAMA*. 2015 Mar 17;313(11):1143-53. PMID: [25781443](#).
Srinivas SV, Deyo RA, Berger ZD. Application of "less is more" to low back pain. *Arch Intern Med*. 2012 Jul 9;172(13):1016-20. PMID: [22664775](#).
- 5 Goldstein LB. Prescribing of potentially harmful drugs to patients admitted to hospital after head injury. *J Neurol Neurosurg Psychiatry*. 1995 Jun;58(6):753-5. PMID: [7608684](#).
Lombard LA, Zafonte RD. Agitation after traumatic brain injury: considerations and treatment options. *Am J Phys Med Rehabil*. 2005 Oct;84(10):797-812. PMID: [16205436](#).
Rao V, Rosenberg P, Bertrand M, et al. Aggression after traumatic brain injury: prevalence and correlates. *J Neuropsychiatry Clin Neurosci*. 2009 Fall;21(4):420-9. PMID: [19996251](#).
Schallert T, Hernandez TD, Barth TM. Recovery of function after brain damage: severe and chronic disruption by diazepam. *Brain Res*. 1986 Jul 30;379(1):104-11. PMID: [3742206](#).
Zafonte RD. Treatment of agitation in the acute care setting. *J Head Trauma Rehab*. 1997;12(2):78-81.
- 6 Basiri K, Katirji B. Practical approach to electrodiagnosis of the carpal tunnel syndrome: A review. *Adv Biomed Res*. 2015 Feb 17;4:50. PMID: [25802819](#).
Bland JD. Do nerve conduction studies predict the outcome of carpal tunnel decompression? *Muscle Nerve*. 2001 Jul;24(7):935-40. PMID: [11410921](#).
Fowler JR, Munsch M, Huang Y, et al. Pre-operative electrodiagnostic testing predicts time to resolution of symptoms after carpal tunnel release. *J Hand Surg Eur Vol*. 2016 Feb;41(2):137-42. PMID: [25770901](#).
Keith MW, Masear V, Chung K, et al. Diagnosis of carpal tunnel syndrome. *J Am Acad Orthop Surg*. 2009 Jun;17(6):389-96. PMID: [19474448](#).
Ono S, Clapham PJ, Chung KC. Optimal management of carpal tunnel syndrome. *Int J Gen Med*. 2010 Aug 30;3:255-61. PMID: [20830201](#).

About The Canadian Association of Physical Medicine and Rehabilitation

The Canadian Association of Physical Medicine and Rehabilitation (CAPM&R) is a proud partner of the Choosing Wisely Canada campaign. The CAPM&R is a member service organization that represents Canadian physiatrists and promotes their pursuit of excellence in the field of physical medicine and rehabilitation. The CAPM&R was founded in 1952 and has over 380 members today.



About Choosing Wisely Canada

Choosing Wisely Canada is the national voice for reducing unnecessary tests and treatments in health care. One of its important functions is to help clinicians and patients engage in conversations that lead to smart and effective care choices.

🌐 ChoosingWiselyCanada.org | ✉ info@ChoosingWiselyCanada.org | 🐦 [@ChooseWiselyCA](https://twitter.com/ChooseWiselyCA) | 📺 [/ChoosingWiselyCanada](https://www.facebook.com/ChoosingWiselyCanada)