References

1. Russell KW, Scaife CL, Weber DC, et al. Wilderness Medical Society practice guidelines for the treatment of acute pain in remote environments. *Wilderness Environ Med*. 2014;25:41–49.
2. Braddom RL. *Physical Medicine and Rehabilitation*. 4th ed. Philadelphia, PA: Saunders Elsevier; 2010.
3. Moore RA, Derry S, Aldington D, Cole P, Wiffen PJ. Amitriptyline for neuropathic pain and fibromyalgia in adults. *Cochrane Database Syst Rev*. 2012;12:CD008242.
4. Hallam M-J, Cubison T, Dheansa B, Imray C. Managing frostbite. *BMJ*. 2010;341:c5864.
5. Imray CHE, Castellani JW. Nonfreezing cold-induced injuries. In: Auerbach PS, ed. *Wilderness Medicine*. 6th ed. Philadelphia, PA: Elsevier Mosby; 2011:178.
6. Thomas JR, Oakley EHN. Nonfreezing cold injury. In: Pandolf KB, Burr RE, eds. *Textbook of Military Medicine, Medical Aspects of Harsh Environments*. Vol 1. Washington, DC: US Army; 2001:467–490.
7. Johnson C, Oakley H. Cold climates. In: Johnson C, Anderson SR, Dallimore J, Winsor S, Warrell DA, eds. *Oxford Handbook of Expedition and Wilderness Medicine*. Oxford, UK: Oxford University Press; 2008:579–606.

In Response to WMS Pain Management Guidelines

To the Editor:

I appreciated the brief overview of analgesia treatment in the Wilderness Medical Society practice guidelines for the treatment of acute pain in remote environments by Russell et al.¹ However, a few additional medications and comments may help guide wilderness medicine providers when choosing pain medication for a medical kit.

Regarding choice of nonsteroidal anti-inflammatory drug (NSAID), meloxicam is worth special mention because of once-a-day dosing, less gastrointestinal toxicity, and less platelet inhibition compared with others. It is the oral NSAID of choice for the tactical combat casualty care trauma pack. Also, if one chooses to carry 2 NSAIDs, it may be prudent to bring 2 from different classes.^{2–4}

Tramadol is an option for acute pain; it is not classified as an opiate or controlled substance in the United States—thus making travel across international borders easier and providing an oral nonopiate option to NSAIDs and acetaminophen.

Corticosteroids such as prednisone and dexamethasone are useful for acute pain when administered orally, intramuscularly, or intra-articularly. That is noteworthy because the latter drug is a staple in most high altitude medical kits.^{5,6}

For adjunctive medications, nonbenzodiazepine skeletal muscle relaxers, like tizanidine, cyclobenzaprine, and methocarbamol, are useful for acute low back pain and acute strains and spasms of joint muscles, such as with a shoulder dislocation.⁷

Topical medications may be useful, particularly for marine or pediatric medical kits. Two notable formulations include lidocaine/prilocaine cream (primarily used as an anesthetic but as an analgesic too) and NSAID creams, which can be used alone or compounded with other topical analgesics such as ketamine, lidocaine, gabapentin, and muscle relaxants.

Specific ophthalmologic, otic, and dental medications for acute pain are also important considerations, as specialized pain medications may eliminate the need for more risky and less-effective systemic medications.

As an aside, Russell et al¹ duly made a note about third-party prescribing with regard to oral opiates. In the United States and in certain other countries, that usually applies to all prescription medicine, not just to opiates. Therefore, this excellent advice should apply to all prescription medicines, not just to opiates.

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References

1. Russell W, Scaife CL, Weber DC, et al. Wilderness Medical Society practice guidelines for the treatment of acute pain in remote environments. *Wilderness Environ Med*. 2014;25:41–49.
2. Singh G, Lanes S, Steinbrü G, Triadafilopoulos G. Gastrointestinal tolerability of meloxicam compared to diclofenac in osteoarthritis patients. *Am J Med*. 2004;117:100–106.
3. Wedmore IS, Johnson T, Czarnik J, et al. Pain management in the wilderness and operational setting. *Emerg Med Clin North Am*. 2005;23:583–601.
4. United States Army Institute of Surgical Research. Tactical combat casualty care guidelines, 28 October 2013. Available at: http://www.usaisr.amedd.army.mil/assets/pdfs/tccc_guidelines_131028.pdf. Accessed April 18, 2014.
5. Holve RL, Barkan H. Oral steroids in initial treatment of acute sciatica. *J Am Board Fam Med*. 2008;21:469–474.
6. Vyvey M. Steroids as pain relief adjuvants. *Can Fam Phys*. 2010;56:1294–1297.
7. Casazza BA. Diagnosis and treatment of acute low back pain. *Am Fam Physician*. 2012;85:343–350.