Addressing Pain in South Carolina

Quick Reference #4

Non-Opioid Pharmacotherapies

Non-opioid pharmacotherapies may be as effective and less risky than opioids. Use this information to inform your clinical decision-making when offering non-opioid pharmacotherapy oral and topical therapies.

Oral Therapy	
Acetaminophen	▪ First-line therapy for the treatment of osteoarthritis and musculoskeletal pain ▪ Not associated with GI ulcer; no significant platelet or anti-inflammatory effect at doses <2000 mg/day ▪ Maximum dosage 2000 mg daily in patients with liver disease and 4000 mg daily in patients without liver disease – Caution patients about acetaminophen in over-the-counter and combination products
Non-Benzodiazepine Skeletal Muscle Relaxants	▪ Use for acute/exacerbation of chronic low back/neck pain with muscle spasms, for short-term use only (<7 days) ▪ Drowsiness is common; avoid driving, operating heavy machinery, and using alcohol ▪ Recommend against using carisoprodol due to potential for abuse and/or misuse ▪ Recommend against using benzodiazepines due to lack of benefit and higher risks
NSAIDs	▪ First-line agents for musculoskeletal pain and acute and chronic low back pain – May be more effective than acetaminophen, but are associated with more side effects (e.g., GI ulceration, CV effects including MI and stroke, and renal toxicity) ▪ Try more than one NSAID, because there can be variability in patient response ▪ Black-boxed warning to avoid perioperative use after CABG* ▪ **Adding an NSAID to a pain regimen containing an opioid may have an opioid-sparing effect of about 20–35%** ▪ **Consider GI and CV risk—review risk factors and prevention of GI and CV toxicity to learn more (see page 9)**

*Do not use perioperatively and avoid in the first 10–14 days after CABG surgery.
CABG-coronary artery bypass graft; CV-cardiovascular; GI-gastrointestinal; MI-myocardial infarction; NSAID-nonsteroidal anti-inflammatory drug.

OPIOID RISK PREVENTION PARTNERSHIP

South Carolina

SCMA South Carolina Medical Association

SCHA South Carolina Hospital Association

Topical Therapy	
NSAIDs	▪ Diclofenac formulations: gel, solution, or patch ▪ Used for localized/regional pain in a joint area like the knee, ankle, shoulder, and wrist – Produces localized anti-inflammatory effects – Evidence does not support use for low back pain ▪ Less systemic side effects compared with oral NSAIDs due to minimal systemic absorption ▪ Safer to use in patients on oral anticoagulants
Lidocaine	▪ Lidocaine patch ▪ Used for peripheral neuropathic pain ▪ Blocks abnormal peripheral neuronal conduction – Provides local analgesia of painful skin where the medication is applied ▪ Systemic absorption is very low when applied to intact skin
Methyl Salicylate	▪ Methyl salicylate formulations: cream, ointment, or patch – Can be combined with menthol and/or camphor ▪ Used for local/regional effect for musculoskeletal pain ▪ Counterirritant causing mild inflammation, which results in deeper pain relief ▪ Apply to intact skin
Capsaicin	▪ Capsaicin formulations: cream or ointment ▪ Used for peripheral neuropathic pain and musculoskeletal pain ▪ Depletes substance P with daily use leading to desensitization of sensory nerve fibers and resulting in less pain ▪ Must use multiple times every day to maintain effect

Source: U.S. Department of Veterans Affairs. (2017). *Acute Pain Management: Meeting the Challenges.* Retrieved from **https://www.pbm.va.gov/PBM/AcademicDetailingService/Documents/Academic_Detailing_Educational_Material_Catalog/Pain_Provider_AcutePainProviderEducationalGuide_IB10998.pdf**