

Pain Management

Pain management is crucial. Even when the underlying disease process is unvarying, uncontrolled pain can prevent patients from working productively and enjoying recreational activities. Chronic pain may have a countless number of causes and perpetuating factors. It can be much more difficult to manage than acute pain, requiring a multidisciplinary approach and customized treatment protocols to meet the specific needs of each patient.

There are numerous ways to treat pain. Optimal treatment may involve the use of medications that possess pain-relieving properties including some antidepressants, anticonvulsants, antiarrhythmics, anesthetics, antiviral agents, and NMDA (N-methyl-D-aspartate) antagonists.

By combining various agents which utilize different mechanisms to alter the sensation of pain, physicians have found that smaller concentrations of each medication can be used.

Topical and transdermal creams and gels can be formulated to provide high local concentrations at the site of application (e.g., NSAIDs for joint pain) and combinations of medications can be used alone or in combination for neuropathic pain (e.g., gabapentin, clonidine, ketamine). Side effects associated with oral administration can often be avoided when medications are used topically. Studies suggest that there are no great restrictions on the type of drug that can be incorporated into a properly compounded transdermal gel. When medications are administered transdermally, they are not absorbed through the gastrointestinal system and do not undergo first-pass hepatic metabolism.

Our pharmacists work with prescribers to find the best option to help manage patient pain.

Why Use Products for Pain Management?

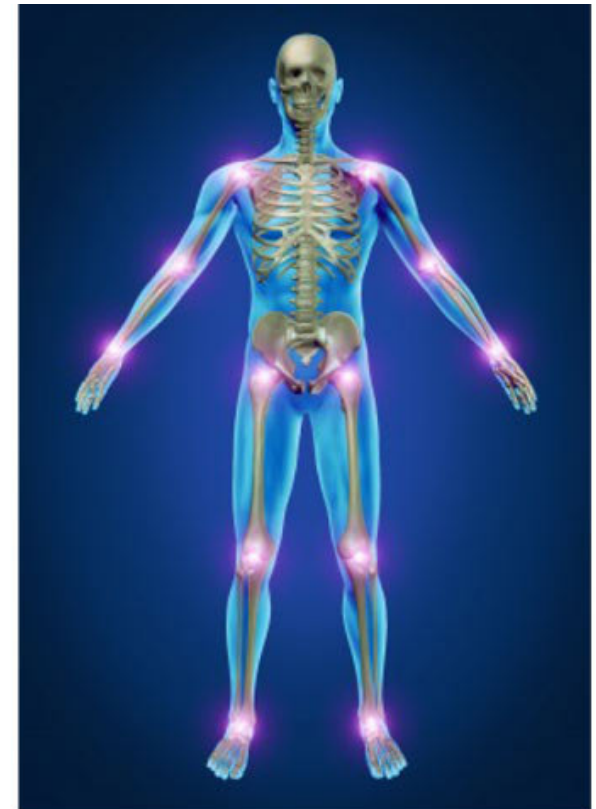
We know that the right medicine can change someone's life and for decades we have been delivering that promise with our professionally compounded medicines.

Our Pharmacists

- Build strong relationships with patients and medical providers to complete the treatment circle and provide the best health care possible
- Comply with standards set by:
 - United States Pharmacopeia (USP)
 - American Society of Health System Pharmacists
 - Board of Pharmacy
- Use the quality raw materials that meet or exceed USP standards
- Test products internally and send samples to an independent laboratory for testing
- Review each prescription numerous times during preparation as part of our rigorous operating procedures

The processes we have developed over time and continue to improve and test regularly make a difference in the end product. Stokes guarantees the reliability of its compounded medicines for safety, stability and potency.

Products compounded by Accredited Pharmacies



THE SCIENCE OF PAIN

Topical Pain Management

- More drug where the pain exists
 - Less side effects
- Fast absorption at site of pain



TRANSDERMAL DELIVERY

Advantages of Transdermal Route

- Fewer side effects
- Can produce a more localized action
- Fast onset of action
- High drug concentration in tissue that requires analgesia
- Coverage by Health Plans

Key to Positive Outcomes

- Multiple ingredients with complimentary modes of action
- Penetration enhancing base
- Patient compliance

General Pain & Inflammation

Musculoskeletal pain, tendinitis, tendinosis, general pain

No. 2 Lotion

Ketoprofen 10%
Cyclobenzaprine 2%
Baclofen 2%
Lidocaine 2%

No. 3 Lotion

Tramadol 5%
Ketoprofen 20%
Cyclobenzaprine 2%
Baclofen 2%

No. 11 Lotion

Ketoprofen 10%
Lidocaine 5%

No. 12 Lotion

Ketoprofen 10%
Cyclobenzaprine 2%
Capsaicin 0.075%

Back & Radicular Pain

Back pain, sciatica or failed back syndrome

No. 14 Lotion

Ketamine 10%
Clonidine 0.2%
Gabapentin 6%
Ketoprofen 10%
Lidocaine 2%

No. 15 Lotion

Gabapentin 6%
Clonidine 0.1%
Diclofenac 2%
Lidocaine 2%
Pentoxifylline 5%

Neuropathic & Chronic Pain

Neuralgia, post-herpetic neuralgia, shingles, diabetic & chemotherapy induced peripheral neuralgia, phantom limb pain

No. 4 Lotion

Ketoprofen 10%
Guaifenesin 10%
Capsaicin 0.075%
Cyclobenzaprine 2%

No. 5 Lotion

Ketamine 10%
Baclofen 2%
Gabapentin 6%
Imipramine 3%
Nifedipine 2%
Lidocaine 2%

No. 6 Lotion

Ketamine 10%
Lidocaine 5%
Acyclovir 10%
Amitriptyline 2%

No. 7 Lotion

Ketoprofen 20%
Baclofen 2%
Cyclobenzaprine 2%
Gabapentin 6%
Lidocaine 2.5%

No. 8 Lotion

Ketamine 10%
Baclofen 2%
Cyclobenzaprine 2%
Ketoprofen 10%
Gabapentin 6%

No. 10 Lotion

Ketamine 10%
Baclofen 2%
Cyclobenzaprine 2%
Diclofenac 3%
Gabapentin 6%
Lidocaine 2%

| Medication | Pain Category |
|-----------------|---|
| Acyclovir | Anti-Viral Agent |
| Amitriptyline | Chronic/Neuropathic Pain (Sympatholytic) |
| Baclofen | Skeletal Muscle Relaxant |
| Capsaicin | Blocks Pain (Depletes/ Interferes with Substance P) |
| Clonidine | Chronic/Neuropathic Pain (Alpha-2 Agonist) |
| Cyclobenzaprine | Skeletal Muscle Relaxant |
| Diclofenac | NSAID, Analgesic |
| Gabapentin | Chronic/ Neuropathic Pain |
| Guaifenesin | Skeletal Muscle Relaxant |
| Imipramine | Chronic/Neuropathic Pain |
| Ketamine | General Anesthetic (NMDA Antagonist) |
| Ketoprofen | NSAID, Analgesic |
| Lidocaine | Local Anesthetic |
| Nifedipine | Chronic/Neuropathic Pain (L-Type Calcium Blocker) |
| Pentoxifylline | Anti-Hyperalgesic (TNF-1A Antagonist) |
| Tramadol | Non-Narcotic Analgesic (Weak Opioid Agonist) |