

Drug Information for Topical Pain Cream Ingredients

- Amitriptyline** - Amitriptyline is a tricyclic antidepressant agent. It is reported to stabilize nerve ending and has been used extensively as an analgesic agent for management of neuropathic pain.
- Baclofen** - Baclofen is a GABA_B receptor agonist. GABA receptor agonists primarily cause muscle relaxation. Baclofen is commercially available as an oral tablet and an intrathecal injection. Baclofen helps reduce painful muscle spasms and clonus in patients with multiple sclerosis and other musculoskeletal conditions
- Bupivacaine** - is an anesthetic agent. It provides localized numbness to the applied area and helps stabilize nerve endings, thereby reducing painful stimuli
- Cyclobenzaprine** - Cyclobenzaprine is a muscle relaxant agent structurally similar to the tricyclic antidepressants. When incorporated into creams it is reported to be very effective in relieving muscle tightness.
- Diclofenac** - This is a non-steroidal anti-inflammatory drug (NSAID) that works to reduce inflammation and pain. Diclofenac is similar to ibuprofen and naproxen but is more effective topically than either of those agents. An advantage of topical Diclofenac is that high tissue concentrations are achieved without high systemic concentrations. A lack of systemic absorption minimizes the incidence of side effects such as GI upset.
- Doxepin** – Doxepin is used to treat depression, anxiety, and insomnia. Doxepin is in a class of medications called tricyclic antidepressants. It works by increasing the amounts of certain natural substances in the brain that are needed for mental balance.
- Gabapentin** - Topically administered gabapentin is reported to stabilize nerve endings thus decreasing nerve pain and helping to facilitate the healing process.
- Guaifenesin** has been shown in several studies to be an effective muscle relaxant and has been used extensively in several European countries. Patients experiencing leg cramps and restless leg syndrome have benefited from topical guaifenesin. The exact mechanism of action of guaifenesin is not entirely clear. It is postulated that the site of action is through the interruption of the polysynaptic reflex in nerve cells. Guaifenesin is structurally related to methocarbamol and carisoprodol, oral muscle relaxants sold under the brand names Robaxin, and Soma respectively.
- Ibuprofen** is a nonsteroidal anti-inflammatory drug (NSAID), which relieves pain and swelling (inflammation). It is used to treat headaches, muscle aches, backaches, dental pain, menstrual cramps, arthritis, or athletic injuries.
- Ketamine** - Ketamine is a potent NMDA receptor antagonist and is therefore effective against pain of neuropathic origin. Ketamine when given IV and at higher doses is a general anesthetic agent used in surgical procedures.
- Ketoprofen** - This is a non-steroidal anti-inflammatory drug (NSAID) that works to reduce inflammation and pain. Ketoprofen is similar to ibuprofen and naproxen but is more effective topically than either of those agents. An advantage of topical ketoprofen is that high tissue concentrations are achieved without high systemic concentrations. A lack of systemic absorption minimizes the incidence of side effects such as GI upset.
- Lidocaine** - Lidocaine is an anesthetic agent. It provides localized numbness to the applied area, thereby reducing painful stimuli.
- Meloxicam** – is a non-steroidal anti-inflammatory drug (NSAID). It helps to relieve pain and swelling from inflammation
- MSM** - is an abbreviation for methylsulfonylmethane. MSM is the biologically active form of sulfur and is present in all living organisms. Sulfur is one of the most abundant minerals in the body. Sulfur is contained in muscular tissue, skin and bones. MSM is found in raw vegetables including broccoli, peppers, Brussels sprouts, onions, asparagus, and cabbage. MSM is a sulfur compound but should never be confused with sulfa drugs, to which some people are allergic. MSM is non-toxic. MSM is what gives DMSO its anti-inflammatory properties, but it doesn't cause DMSO side effects such as reddening and itching of the skin, nasal congestion, shortness of breath, excess intestinal gas, and allergic reactions. DMSO has a strong sulfur odor resulting in a garlic smell. MSM is odorless. MSM possesses significant medicinal and therapeutic properties. MSM works as a natural anti-inflammatory agent, increases permeability of cell membranes, enhances circulation locally, and speeds up healing to wounds and scars.
- Orphenadrine** – Orphenadrine is a muscle relaxant with NMDA antagonist activity. Topical concentrations used are 5-10%. It is reported to block pain transmission and cause muscle relaxant effects.
- Pentoxifylline** – Pentoxifylline is a Tumor Necrosis Factor antagonist (TNF-1 α). Tumor necrosis factor is a substance produced primarily by monocytes and macrophages in response to inflammatory processes such as arthritis. Topical pentoxifylline reduces inflammation by inhibiting TNF at the cellular level. It is a useful ingredient whenever inflammation is present. Sciatica and neuropathic pain also respond well to pentoxifylline administration. Concentrations used are 5-10%.
- Piroxicam** - Piroxicam is a potent non-steroidal anti-inflammatory agent. It is effective for management of arthritic inflammatory pain and swelling resulting from soft-tissue and skeletal muscle injuries.
- Tetracaine** is a topical anesthetic agent that numbs the area and helps stabilize nerve endings, thereby reducing pain

Side effects - This cream has a localized effect. Experience with other patients suggests that there should not be any significant systemic side effects when the medication is applied topically at normal dosage recommendations, however, if any of the following serious symptoms occur, stop using this medication and seek medical attention: skin rash; itching; difficulty moving; throat tightness or chest tightness; difficulty breathing; clumsiness; dizziness, feeling faint; fever; flu-like symptoms; irregular, pounding, or fast heartbeat; seizures; bloody vomit; bloody diarrhea, or black, tarry stools; significant skin bruising; ringing in the ears; swelling of the feet, hands, ankles, or lower legs; blurred or double vision or other changes in your vision; severe headache; numbness of the tongue; hypoactivity; muscle contractions; loss of strength; dry mouth; confusion; agitation; shaking, or trembling, agranulocytosis (a rare but serious drop in your white blood cell count), mouth ulcers, vomiting, constipation, persistent diarrhea, elevated liver enzymes. In extreme cases - some symptoms may progress to seizures, coma, respiratory and cardiac arrest. Stop using this product if you develop any redness, irritation, itching, stinging, blistering, or burning at the application site. Do not use this product if you are allergic to eggs (one of the ingredients -- lecithin-isopropyl palmitate -- can trigger allergies in patients allergic to eggs)

Oral NSAIDs (Ibuprofen, Ketoprofen, Piroxicam, Meloxicam and others) can cause an increased risk of serious cardiovascular events, including myocardial infarction [heart attack] and stroke, which can be fatal. This risk may occur early in treatment and may increase with duration of use. Oral NSAIDs can also cause an increased risk of serious gastrointestinal (GI) adverse events including bleeding, ulceration, and perforation of the stomach or intestines, which can be fatal. These events can occur at any time during use and without warning symptoms. Oral NSAIDs can also alter clotting times in patients taking blood thinners such as Warfarin. It is unknown if the risk of occurrence is lessened when these medications are applied topically.

Methemoglobinemia (a rare condition where hemoglobin is unable to adequately transport oxygen through the bloodstream) can occur with the use of topical anesthetics (such as Lidocaine, Tetracaine, and Bupivacaine). Symptoms of methemoglobinemia include cyanosis (blue coloring of the skin or lips), anxiety, rapid heart rate, seizures, and acidosis. Patients with a history of glucose-6-phosphate dehydrogenase (G6PD) deficiency are at increased risk of developing methemoglobinemia. **IF THIS OCCURS - STOP USING YOUR CREAM AND SEEK IMMEDIATE MEDICAL ATTENTION!**

- Amitriptyline side effects:** (oral administration) dry mouth, constipation, urinary retention, blurred vision, increased heart rate, increased appetite, confusion, disorientation.
- Baclofen side effects:** (oral administration) confusion; dizziness or lightheadedness; drowsiness; nausea; unusual weakness, especially muscle weakness; slurred speech, blurred vision, urinary frequency)
- Cyclobenzaprine side effects:** (oral administration) drowsiness, dry mouth, dizziness, sedation, upset stomach, loss of strength, constipation, taste changes, blurred vision, headache, nervousness, may occur following oral administration.
- Diclofenac side effects:** (oral administration) headache, dizziness, nervousness, upset stomach, stomach pain or cramps, vomiting, constipation, diarrhea, gas. As with other NSAIDs, diclofenac is contraindicated in patients with aspirin or ibuprofen-induced asthma, bronchospasm, or anaphylaxis. Although the likelihood of a drug interaction with warfarin (Coumadin®) is reduced, patients on warfarin should be advised to continue with regular INR checks and watch for any symptoms of increased bleeding or bruising.
- Doxepin side effects:** (oral administration) dry mouth, constipation, urinary retention, blurred vision, increased heart rate, increased appetite, confusion, disorientation.
- Gabapentin side effects:** (oral administration): drowsiness, headache, fatigue blurred vision, tremor, anxiety, irregular eye movements, and dizziness.
- Guaifenesin side effects:** Guaifenesin is very well tolerated when applied topically. Large oral doses can cause nausea and GI upset. Stop using this product if you develop any redness, irritation, itching, stinging, blistering, or burning at the application site. Do not use this product if you are allergic to eggs (one of the ingredients -- lecithin-isopropyl palmitate -- can trigger allergies in patients allergic to eggs)
- Ibuprofen side effects:** Ibuprofen may infrequently cause serious (rarely fatal) bleeding from the stomach or intestines. If you notice any of the following rare but very serious side effects, stop taking ibuprofen and seek immediate medical attention: black stools, persistent stomach/abdominal pain, vomit that looks like coffee grounds, chest pain, weakness on one side of the body, sudden vision changes, slurred speech.
- Ketamine side effects:** (IV administration) Blurred or double vision or other vision problems, dizziness, lightheadedness, feeling faint, drowsiness, headache, mood or mental changes, nausea (mild) or vomiting, nightmares or unusual dreams.
- Ketoprofen side effects:** (oral administration) headache, dizziness, nervousness, upset stomach, stomach pain or cramps, vomiting, constipation, diarrhea, gas. As with other NSAIDs, ketoprofen is contraindicated in patients with aspirin or ibuprofen-induced asthma, bronchospasm, or anaphylaxis. Although the likelihood of a drug interaction with warfarin (Coumadin®) is reduced, patients on warfarin should be advised to continue with regular INR checks and watch for any symptoms of increased bleeding or bruising.
- Lidocaine, Bupivacaine, and Tetracaine side effects:** side effects from topical Lidocaine and Bupivacaine are uncommon. Possible side effects include: skin paleness, redness, a changed ability to feel hot, cold, or painful stimuli, swelling (rare), itching, rash, burning sensation. Methemoglobinemia (a rare condition where hemoglobin is unable to adequately transport oxygen through the bloodstream) can occur with the use of topical anesthetics. Symptoms of methemoglobinemia include cyanosis (blue coloring of the skin or lips), anxiety, rapid heart rate, seizures, and acidosis. Patients with a history of glucose-6-phosphate dehydrogenase (G6PD) deficiency are at increased risk of developing methemoglobinemia. **IF THIS OCCURS - STOP USING YOUR CREAM AND SEEK IMMEDIATE MEDICAL ATTENTION!**

- MSM side effects-** MSM is not reported to have any side effects when administered topically. Possible localized irritation only.
- Orphenadrine:** (orally administration) drowsiness, dry mouth, nausea, vomiting, lightheadedness, tremor, headache, weakness.
- Pentoxifylline side effects:** (oral administration) Although side effects from pentoxifylline are not common, they can occur. Tell your doctor if any of these symptoms are severe or do not go away: upset stomach, vomiting, gas, dizziness, and headache.
- Piroxicam side effects:** (oral administration) headache, dizziness, nervousness, upset stomach, stomach pain or cramps, GI bleed, agranulocytosis - rare (significant drop in white blood cell count), mouth ulcers, vomiting, constipation, diarrhea, gas, elevated liver enzymes, fluid retention, ringing in ears.
- Tramadol side effects:** (oral administration). You should not take tramadol if you have used alcohol, sedatives, tranquilizers, or narcotic medications within the past few hours. Tramadol can slow or stop your breathing, especially when you start using this medicine or whenever your dose is changed. Never take tramadol in larger amounts, or for longer than prescribed. Do not crush, break, or open an extended-release pill. Swallow it whole to avoid exposure to a potentially fatal dose. Seizures (convulsions) have occurred in some people taking this medicine. Tramadol may be more likely to cause a seizure if you have a history of seizures or head injury, a metabolic disorder, or if you are taking certain medicines such as antidepressants, muscle relaxers, narcotic, or medicine for nausea and vomiting.

How to Apply Your Topical Pain Cream: Apply the prescribed amount of cream and massage into the skin for several minutes (the skin may actually feel warm due to the amount of rubbing involved). The more you can work the cream into the site the better it will work. If the cream feels tacky at any time, add a few drops of water to the skin. Continue massaging the cream into the skin until it is completely absorbed. Caregivers should wear gloves or finger cots when applying to prevent absorption of medication into their skin. **Dosage Limitations:** The maximum amount of this topical cream that should be used on your entire body - during any 24 hour period - is 4gm (1gm = approximately a blueberry-sized amount). Separate your doses by at least 3-4 hours. Never apply more cream than prescribed without first consulting with your physician. What to do if you miss a dose: If you miss a dose of medication try to get back on schedule as soon as feasible. Never take two doses at once.

Storage information: Store this product at controlled room temperature in the original container. Protect from temperature extremes. Keep out of reach of children. Never share your medication with others. Discard any product that is outdated or no longer needed. Remove lid and STIR PRODUCT PRIOR TO USE If cream separation has occurred.