

HOW DMSO IS ADMINISTERED TOPICALLY

The substance is usually administered in liquid or gel form on the surface of the skin; the liquid may be more effective though people seem to prefer the gel. **It is not rubbed in but merely painted or patted on in a thin coating.** When Dr. Jacob showed Sandy Sherrick how to apply the solvent to her neck and back, as shown on *60 Minutes*, he said, **"Now, when you put it on, don't rub it too hard. You just have to apply it to the skin and it goes in. Let it dry over twenty minutes to a half an hour. It won't be totally dry, but anything left you can just wipe off."**

Treatment must be individualized. The optimal concentration varies from 50 to 80 or even 90 percent. In general the face and neck are more sensitive to DMSO than other parts of the body and no higher concentration than 50 percent should be applied there. Topical concentrations of DMSO should be kept below 70 percent in areas where there is a reduction in circulation. Not all clinicians agree that this lesser concentration is necessary. It is preferable to begin treatment with lower concentrations until the skin tolerance builds up. Look for skin irritation before advancing to the higher concentration.

For some rare conditions such as scleroderma or Peyronie's disease (where plaques or strands of dense fibrous tissue encircle the penis, causing deformity and painful erection) the treatment periods are more than a year. How often you administer the DMSO solution depends on the judgment of your doctor and the particular clinical problem.

If the solvent is applied for long periods where there is a lessened blood supply, antibiotics should become part of the therapy, despite their bacteriostatic qualities.

The most common set of health problems for which people will apply topical DMSO at home probably involves acute musculoskeletal injuries and inflammations. The earlier the drug is put onto the injured site, the more dramatic the result. For example, a fourteen-year-old boy was punched in the face. A one-inch laceration with swelling broke open over the bridge of his nose and extended to his eye. Six milliliters (ml) of DMSO were applied to the area. Fifteen minutes later the pain, swelling, and skin irritation started to diminish and disappeared completely within four hours.

The skin must be clean, dry, and unbroken, not only for musculoskeletal problems, but for any topical use of the medication. Remove any excess skin oil or perspiration. Make sure heavy metal or insecticide material has not been allowed to dry on or coat the

skin. The medical conditions that respond best are acute post-traumatic soft tissue injuries to the neck, shoulders, and back, sprains and strains of the larger joints of the upper and lower limbs, acute post-traumatic soft tissue injuries associated with subcutaneous and intramuscular bleeding involving the trunks or the limbs, and acute bursitis involving the large joints of the body.

A 70 percent concentration of DMSO mixed with water in volumes ranging from 8 to 12 ml, applied on and around the injury in a wide area at least three times daily, will provide effective healing response for four out of five people. Some benefit will be experienced within twenty-four hours.

Measure out the amount of DMSO you judge is required to cover the affected area. Paint on the solution with a cotton-tipped applicator. As an example, to treat gout of the big toe, apply about 6 ml of the material to the toe and the entire forefoot. Usually it requires several minutes of painting and repainting before an adequate dosage is achieved. Allow the treated area to remain uncovered for thirty or forty minutes; any remaining solution should then be wiped off with an absorbent material to prevent injury to your clothing. Relief from gouty swelling and pain occurs in thirty minutes and lasts for one to four hours. Repeated applications up to four times daily will adequately control the pain of acute gout.

When 60 to 90 percent DMSO is applied to the skin, warmth, redness, itching, and sometimes local hives may occur. In most cases this local irritation disappears within two to three hours. The skin surfaces behind the knee and elbow joints and the skin of the face, neck, and armpit are sensitive to strong concentrations of the solvent. When 60 to 90 percent concentration is applied to the palm of the hand, the skin may wrinkle and stay that way for several days.

Some liniments give pain relief, decreased muscle spasm, and increased mobility of affected arthritic joints through a counterirritant effect. Ordinary liniments take pain away only as long as counterirritation lasts. This is not how DMSO works. In contrast, with DMSO the skin reaction of hives and irritation disappears while the beneficial effects last for several hours.

An interesting observation is that the application of DMSO to one affected joint or area often leads to pain relief in some other location. DMSO has systemic effects. It is a depressant to the central nervous system and, of course, it reaches all areas of the body when absorbed through the skin and into the blood stream.

