There is significant scientific evidence that the application of heat can be effective for pain control, and helps to improve range of motion, and possibly wound healing. (ref. 1-4)

Most insurers, including Medicare (ref 1-2), recognize the benefits of heat: as stated on the Aetna website "general indications for therapeutic heat include pain, muscle spasm, contracture, tension myalgia, hematoma resolution, bursitis, tenosynovitis, fibrositis, fibromyalgia, superficial thrombophlebitis, and collagen vascular diseases."

Studies on wound healing have clearly shown improvement in wound blood flow and subcutaneous oxygen tension with the use of localized heat. Which may reduce the risk of post operative infection (ref 5) heat also has been demonstrated to improve joint range of motion for joint contracture (ref 6).

Recent studies have shown that a therapeutic heat wrap improves function, and decreases pain in patients with wrist injuries (ref 7), was more effective than ibuprofen and acetaminophen for acute low back pain (ref 8) and significantly improved pain scores following hernia surgery (ref 9).

While controlled heat has significant benefits, excessive heat may cause tissue necrosis if the temperature exceeds 107°F. The maximum safe warming temperature is 105°F. A common problem with heating pads or micro-waved packs is that they may exceed this maximum warm temperature and are often difficult to control as therapeutic tools. Prolonged use with heating pads at maximum settings often leads to tissue damage especially in an older patient population. The VitalWrap System is designed to deliver the maximum heat therapy at 105°F indefinitely.

It is clear that the VitalWrap system is the only system appropriate for short term and long term care of tissue injury, whether caused by trauma or surgery.

Reference List


