



<b>Medical Policy:</b> Cold Compression			
<b>Physician Reviewer:</b>	Christian Whitney, D.O.	<b>Reviewed Date:</b>	N/A
<b>Specialty:</b>	Anesthesiology, Pain Management	<b>Established Date:</b>	10/15/2018
<b>Referral Number:</b>	1143228		

**POLICY**

- **Shoulder:** Cold compression therapy is not recommended for the shoulder.
- There is no evidence that supports cold compression therapy over cost-effective ice packs following shoulder surgery.
- **Knee/Leg:** Home rental recommended as an option for up to 7 days following major knee surgery, but not for routine arthroscopic procedures or non-surgical treatment. This option should only be reserved for complex and painful knee procedures.
- A random controlled trial compared compression cryotherapy to traditional cryotherapy (ice pack), and patients treated with compression after ACL reconstruction had better pain relief and less dependence on narcotics.

**SUPPORTING DOCUMENTATION**

ODG Shoulder (updated 9/10/2018) - Online version

Cold compression therapy

Not recommended for the shoulder.

See Cold compression therapy in the Knee Chapter.

While limited evidence may support occasional post-operative use following major knee surgery, it has not been shown to be much better than simple, cost-effective ice packs following shoulder surgery. An RCT comparing 1-week use of compressive cryotherapy (CC) vs. ice wrap after arthroscopic rotator cuff repair or subacromial decompression demonstrated no significant differences in average pain, worst pain, or amounts of narcotic used. (Kraeutler, 2015) Another RCT looked at the effects of cold compression vs. conventional ice packs only during the initial 24 hours following shoulder arthroscopy, noting equivalent reductions in swelling and skin surface temperature, with only some modest pain advantage for the CC group. The authors could not recommend CC, questioning its expense. (Alfuth, 2016)

ODG Knee and Leg (updated 7/6/2018) - Online version

Cold compression therapy

Recommended as an option home rental for up to 7 days following major knee surgery, but not for routine arthroscopic procedures or nonsurgical treatment.

See also Continuous-flow cryotherapy and Intermittent pneumatic compression devices.

Although few studies are available, there is some evidence that the Game Ready system improves pain outcomes shortly after surgery. It combines continuous-flow cryotherapy with dynamic intermittent vasocompression. While

there is a more robust literature examining the less expensive continuous-flow cryotherapy, there have been relatively few reliable studies on Game Ready or any other similarly combined systems. Also, intermittent pneumatic compression devices (IPCDs) are not generally recommended for home use. A case-control study of 39 consecutive anterior cruciate ligament (ACL) reconstruction patients suggested that Game Ready performed better than static compression plus cryotherapy during postoperative recovery, with less need for analgesics. (Murgier, 2014) Another RCT compared compression cryotherapy (CC) to traditional cryotherapy (ice pack), and patients treated with CC after ACL reconstruction also had better pain relief and less dependence on narcotics. (Waterman, 2012) A Chinese conducted meta-analysis of 10 RCTs/533 knee surgery patients comparing CC with cryotherapy alone noted a tendency to have less pain and swelling at post-op day 1 and 2, but no significant differences were noted following that time. (Song, 2016) Therefore, these more expensive and complex devices should be reserved only for more complex and painful knee procedures.

### **REFERENCE(S)**

ODG Shoulder (updated 9/10/2018) - Online version

ODG Knee and Leg (updated 7/6/2018) - Online version