

FAST FACTS: Non-Drug Treatment: Cold

Cold treatments such as frozen gel packs, bag of frozen peas or cold cloths are placed at or near the site of the pain to relieve the pain. Works by numbing nerve endings in the skin, reducing muscle spasms, and decreasing swelling. Cold applications may work better than heat in some situations. Research has found: 1) Cold usually relieves more pain and more quickly than heat. 2) Pain relief from cold lasts longer than pain relief from heat, and 3) Cold is more effective in decreasing pain and swelling in the first 72 hours following an acute injury.



Cold application guidelines:

- Don't use if it increases the pain.
- Provide extra warmth if needed (sweater, blanket) while cold is in place
- Use single layer of cloth between ice pack and skin to prevent skin from freezing.
- For some, a gradual onset of cold application is preferred. This can be achieved by wrapping the cold pack with many layers of cloth and removing the layers slowly, one at a time, so that skin gradually becomes accustomed to cold. Another strategy is to begin with a warm moist cloth between skin and cold pack.
- As individuals age their tactile sensation decreases leaving older adults more susceptible to burns, scratches, etc. The use of a timer, such as an alarm clock or cell phone would be beneficial in preventing burns from cold application.
- Try alternating cold applications with heat. Find correct area or temperature that provides the most relief.
- A variety of items can be used to apply cold therapy including bags of crushed ice, commercially available ice and gel packs, cold compression units and cold whirlpool.
- Avoid applying cold packs to the following:
 - Areas being treated by radiation
 - Areas with poor circulation
 - Open wounds
- Not limited to use at the site of pain. May be applied to the following:
 - On opposite side of body from where pain is felt
 - Above or below site of pain

Necessary Equipment:

1. Gel pack (homemade pack: pour 1/3 cup of rubbing alcohol and 2/3 cup of water into one self-sealing plastic bag. Seal bag and place in freezer until slushy). May also use instant cold packs or may use a frozen bag of peas.
2. Towel or pillowcase
3. Six-inch elastic wrap, or other device to secure the pack

Directions:

1. Remove gel pack from freezer and wrap in pillowcase or towel
2. Make sure bag does not leak
3. Assist your loved one to get into a comfortable resting position and apply gel pack (or other cold application) to painful area, secure with elastic wrap as needed.
4. Gel pack (or other cold application) may be placed above or below site of pain, or on other side of body corresponding to where pain is located.
5. Leave on for 10 – 15 minutes, three to four times a day (can be applied for up to 20 minutes, but minimum time needed is 5 – 10 minutes). Note: cold presses need to be applied to the tissue for a minimum of 5 minutes to be effective in decreasing edema (swelling).
6. Return gel pack (or other cold application) to freezer for future use.

What else the Caregiver should do

- Ensure you are trained appropriately prior to implementing this Nondrug Treatment Technique, speak with a professional or your loved one's healthcare team to determine correct technique or where to find prior training if you need additional training.
- Provide assistance as needed to your loved one with implementing this Nondrug Treatment Technique, i.e. if needed to apply the cold pack or ace wrap, etc.
- Document all Nondrug Treatment Techniques on your loved one's [Pain Diary](#) and log pain information before and after use of Nondrug Treatment.

References:

1. Adapted from: Fouladbakhsh, J.M., et al., Nondrug therapies for pain management among rural older adults. *Pain Manag Nurs*, 2011. 12(2): p. 70-81. 2. The Nursing Home Pain Management Algorithm Clinical Trial, R01 NR009100, 7/1/05 – 4/30/10; Mary Ersek (PI); Used with permission of Mary Ersek and HPNA (2009).
2. Abu-Sittah, G.S., Chahine, F.M., & Janom, H. (2016). Management of burns in the elderly. *Annals of Burns and Fire Disasters* 29(4). 249-245. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5347309/>
3. Fernandes, I. A., Armond, A. C., & Falci, S.G.M. (2019). The effectiveness of cold therapy (cryotherapy) in the management of inflammatory parameter after removal of mandibular third molars: A meta-analysis. *International Archives of Otorhinolaryngology* 23(2), 221-228. doi:10.1055/s-0039-1677755
4. University of Rochester Medical Center. (2020). Cold therapy (cryotherapy) for pain management. Retrieved from <https://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=134&contentid=95>

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