

Argus Orthopaedic Zone

My Perspective on Physical Therapy, Continued

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In our continuing discussion of Physical Therapy I need to touch on aquatherapy.

In a word Aquatherapy is wonderful. I really can't think of any condition I treat that would not benefit from a therapy pool. I guess a draining or non healed wound would be an exception. The warmth and buoyancy of the water is amazingly therapeutic making everything work better. Too bad some of my patients couldn't spend all their time in the pool! I know that is impractical and besides that their families would miss them!

Anything can get better in a therapy pool. Unfortunately most people don't have ready access to a pool.

Cold, Heat or Both; it's confusing.

Applying ice during the first 48 hours after injury is standard. After this period, heat therapy is more beneficial to healing.

But when physical therapists are seeing patients, they often use both. Why? The therapist usually is not seeing the patient in the first 48 hours. So the same rules don't exactly apply as in a new injury. Therapists will often apply heat to an area for 15 minutes, then cold for 15 minutes then stop when they are seeing someone beyond 48 hours of injury.

Heat (thermotherapy) effect

Deactivates nerve fibers that cause muscles to spasm

Induces release of endorphins (body chemicals that block pain transmission)

Loosens muscles

Increases muscle flexibility

Causes blood vessels to dilate, removes cell debris from damaged tissue and brings in healing nutrients

Cold (cryotherapy) effect

Kills pain by somehow "deadening" nerve cell activity

Reduces swelling and inflammation by constricting blood vessels

Causes muscles to be less sensitive to stretching thereby decreasing tissue damage

Warning

Whether using heat or cold be careful not to apply it directly to the skin. Cover skin with something like a tee shirt and stay within the 15 minute time period for heat and 15 minutes for cold.

Electrostimulation (E-stim)

It is thought that nerve cells can be prevented from sending pain impulses to the brain if an electrical current is applied to a painful area. E-stim can reduce swelling and cause immobilized muscles to contract. This can reduce atrophy and increase muscle strength.

Ultrasound/Steroid

If you have read a physical therapy prescription I have written you may have noticed a word, iontophoresis. A five dollar doctor word for a technique used by the therapist. A steroid (cortisone cream) is applied over an area and ultrasound is then used to “drive” the cortisone into the tissues to relieve inflammation. Ultrasound is often used without cortisone also. Ultrasound is high frequency sound waves producing deep heat to an injured area and it stimulates blood flow to promote healing.

Home Exercise

Depending on the particular problem a tailored program of home exercises is often used by me on my physical therapy prescription. This instructs the physical therapist to develop an exercise program to use in the physical therapy department and to design a home exercise program that will compliment the exercises done at the physical therapy facility. So called therabands are often used at home. The therapist instructs in their use and gives them to the patient. These help with strength as well as range of motion.

Hopefully you have a good overview of Physical Therapy as I use it. I hope you realize how much I depend on therapy to make you better. All patients I see obviously don't need to “go to therapy”, but of those who do it can really make a difference.

Office Website and Argus Orthopaedic Archive

I hope what you have read has raised questions. No problem!

Please log onto www.orthopodsurgeon.com. It has a huge amount of musculoskeletal information in the Website and the Archive of all previous Argus articles.

Check it out and be amazed what you can learn.

Good health. Good life. All the best to you. Be well.

Dr. Haverbush