## Hydrotherapy for chest colds in children

## Why hydrotherapy?

The use of hydrotherapy is one of the oldest traditional treatments. There are many different types of hydrotherapy, including baths, steams, pour-over therapies, and the application of wet towels or sheets. In this case we are interested in contrast hydrotherapy, or using water that alternates from hot to cold to stimulate circulation and immune system function.

Warm water vasodilates, improving circulation to peripheral tissues (like the nose, sinuses, hands and feet). Cold water vasoconstricts, reducing circulation to peripheral tissues and increasing circulation to vital organs (like the heart and lungs). Alternating warm and cold water further increases circulation and acts as a physiologic pump, increasing the flow of lymphatic tissue. This improves immune system function by forcing the movement of immune cells (white blood cells) in and out of circulation. One study even shows improvement in bronchial function after cold applications.

## **Cautions**

This is not a substitute for other medical treatments, but can typically be used alongside them. Use extreme caution to make sure the water temperature is not too hot or too cold for your child.

Any patient with decreased sensations (diabetics, patients who are paralyzed, etc.) should not do contrast hydrotherapy. Children need to be old enough to verbalize what they are feeling. This should not be done on an asthmatic child, as it could trigger a bronchospasm. Contrast hydrotherapy is controversial in patients with cancers, as it could theoretically promote the spread of the cancer.



## Hydrotherapy chest rub instructions

- 1. Prepare a warm bath in the bathroom. Prepare a bowl of ice and bring into the bathroom.
- 2. Have your child soak in a very warm bath for 5 minutes. Try to let your child "swim" if possible, or attempt to have your child submerge their chest. Alternately you can pour water over the chest, making sure to keep airways above water. Your child should be very warm before applying the ice rub, to the point where adding the ice actually feels good.
- 3. Rub the chest above and between the nipples for 15 seconds with 1-3 ice cubes. Use fast, vigorous motions. The ice should feel very cold, but should not burn. (If it does burn you are likely not moving quickly enough.) Tell your child "the cold will chase the cough away!" Your child can stay in the tub for the ice rub, just make sure their chest is above the hot water.
- **4.** Rub ice on your child's back for 15 seconds with 1-3 ice cubes per side. Use a "J" shape to rub the ice on the left side. Use an "L" shape to rub ice on the right side. Using the "J" and "L" shapes will allow you to reach the area under the armpit. Again, use fast motions to prevent the ice from hurting.
- **5. Repeat the warm water soak for 5 minutes.** Again your child should be very warm. If they become chilled then add hot water or wait a few more minutes before moving on to the 2nd ice rub.
- 6. Repeat steps 3 and 4 for the second round of the ice rub.
- 7. Repeat the warm water soak for 5 minutes.
- 8. Repeat steps 3 and 4 for the 3rd round of the ice rub.
- 9. Bring your child out of the bath and wrap them in a nice warm, fluffy towel.

You should have completed three rounds of warm followed by three rounds of ice rubs. Ending on cold is preferred, but if the child is still cold they can warm up in the bath following. Typically children find the first ice treatment quite cold. They will find the 2nd ice treatment more comfortable, and barely feel the 3rd ice treatment. Children who become chilled during the ice treatment were probably not warmed up enough in the bath before doing the ice treatment.

For most children this treatment is very effective and will often resolve or reduce a cough immediately.