

## **Costochondritis**

**Overview:** Costochondritis is an inflammation in the cartilage of the rib cage. It usually occurs where the ribs meet the bony plate across the front of the chest called the sternum. Between each rib and the sternum is a small segment of cartilage that forms the joints. These joints can get inflamed with arthritis, which can spread across the chest wall. Chest wall movement, including deep breathing, sneezing or coughing increases the pain. The disorder is more common in young women, especially those with young children. Young mothers frequently stress their chest wall while holding their child in their arms. In addition, women frequently have physical responsibilities in which they are not strong enough to safely carry out. Increased physical demands placed upon a relatively weak musculoskeletal system can lead to costochondritis.

**Diagnosis:** The patient with costochondritis will have chest pain. It can be either to the left or right of the sternum. Chest pain should not to be ignored because it may indicate a serious problem with the heart or lungs. The doctor will perform a careful history and physical exam, and possibly order X-rays or blood tests to rule out serious problems. If costochondritis is present, the doctor will discover tenderness over the joints and ribs of the chest wall. Unfortunately, costochondritis itself will not show up on any X-ray, but in extreme cases a bone scan may be positive.

**Treatment:** Most sudden flare-ups can be treated with an ice pack and the use of oral anti-inflammatory drugs such as aspirin or Motrin. Usually over 48 hours, the patient will improve and can become active. As long as the patient doesn't over utilize his or her arms, the chest pain will stay at a minimal level. However, it is not always practical to limit our physical activities. Indeed, many young women have the responsibilities of a job and running a household. In this situation, if the pain fails to resolve, injections with powerful anti-inflammatory drugs are used to clear up the underlying inflammation of the joints. It may be necessary to inject multiple joints. In this situation, the injections can be given under a light intravenous sedation, with a drug like Valium. This insures the patient will be comfortable during the procedure. Costochondritis is usually a one-time event, although in some patients it can become chronic.

**Prevention:** If you are prone to repeat bouts of costochondritis, try to avoid physical activities that seriously overload your musculoskeletal system. Engage in proper strength training to build the muscles of the chest wall, which will stabilize the joints. If you feel a bout of costochondritis coming on, rest, apply ice and take oral anti-inflammatory agents. If inflammation can be decreased early on, the pain will be minimized.