

## Chest Wall Disorder: Pectus Excavatum

Pectus excavatum is when several ribs and the sternum (breastbone) grow abnormally, making the chest “caved-in.” It may also be called “funnel chest” or “sunken chest.”

It can get worse as kids get older and is more common in boys than girls. Severe pectus excavatum can make it hard to exercise or play sports, and cause other health problems.

### Causes

There is no known exact cause but it may run in families. Most often it arises from problems with the breathing muscles. Kids who have it may have other health issues, such as connective tissue disorders.

### Symptoms

You may or may not notice an indent in the chest. Since the chest wall surrounds and protects the heart and lungs, children may:

- Feel short of breath, especially during exercise
- Chest pain
- Coughing or wheezing
- Have a fast heartbeat
- Feel tired

### How It Is Diagnosed

Your child’s doctor will perform an exam on your child. If needed, the doctor might also order imaging (CT or MRI), heart or lung tests.

### Treatment

Most kids with mild cases who aren’t bothered by their appearance and don’t have breathing problems don’t need treatment. If treatment is needed, the options include:

- **Physical therapy (PT):** We recommend chest PT for all patients.
- **Surgery:** Severe cases may require surgery. Surgery can improve a child’s emotional and physical well-being. It can also improve exercise tolerance and quality of life.

### Types of Surgery

- **Nuss procedure:** This is a minimally invasive technique. It places a metal bar into the chest to reshape it. Patients will need a second surgery three years later to remove the bar. This is used for patients 12 years old and above.
- **Modified Ravitch procedure:** This is a more invasive, open surgery. This technique involves the surgeon reshaping the chest. This is used less often for certain patients.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2024 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing HF#8355.