Chest pain is one of the most frequent presenting symptoms to a family doctor or emergency room. Each year, over 5 million people present to a medical facility with chest pain. Fortunately, most of the time their chest pain is not due to heart disease. The vast majority of these patients have non-cardiac chest pain (NCCP).

NCCP is a term used to describe chest pain that resembles angina but the pain is not from their heart. The pain is usually felt behind the breast bone and it is not unusual to last for hours at a time. It can radiate into the arm or into the back and at times be associated with food intake. Patients may complain of heartburn or the sensation of stomach juices or food coming back up into the chest or mouth.

Of course, a cardiac source of the pain needs to be ruled out first. Once the heart is ruled out, other sources of the chest pain can be entertained. The heart and the esophagus are located close to one another in the chest cavity. They receive a similar nerve supply. As a result, pain from either organ can feel similar making it difficult to know if the pain is cardiac or esophageal in origin.

The most common source of non-cardiac chest pain from the esophagus is gastroesophageal reflux disease (GERD). GERD results from stomach acid backing up into the esophagus which produces heartburn and chest pain. The treatment for GERD includes lifestyle modifications such as caffeine reduction and not eating before bed as well as acid reduction with medication. Esophageal spasm is another source of esophageal pain that can cause NCCP.

Other common causes of NCCP are musculoskeletal problems located anywhere in the chest wall. Strains and sprains of this area will result in NCCP. This type of pain typically worsens with movement of the involved area like when taking a deep breath. Anti-inflammatory drugs often help with this type of chest pain.

Stress is also associated with NCCP. Chest pain resulting from stress can also lead to shortness of breath, hyperventilation, palpitations, sweating and panic. These symptoms result in a vicious cycle that can worsen the chest pain.

Any chest pain requires immediate medical evaluation. Once the source of the chest pain is identified, the appropriate treatment can be initiated to improve the patient’s symptoms.