# Could stress or anxiety be the cause of high blood pressure?

The answer isn’t as simple as yes or no. Currently, there is no data that supports the claim that stress may result in chronic high blood pressure. Stress does increase blood pressure, but as soon as the person relaxes, the blood pressure goes back to normal. However, one of the ways that people deal with constant stress is overeating and smoking. Those two factors definitely do contribute to higher blood pressure. Overeating eventually causes obesity, which increases the rate at which plaque is formed within the arteries (atherosclerotic process). Smoking is also a major factor that contributes to atherosclerosis. In turn, atherosclerosis of arteries that supply your kidneys with blood triggers a reflectory elevation in blood pressure.

## What can cause a sudden heart attack in young people?

The number one culprit behind a sudden heart attack in young people is **Hypertrophic Cardiomyopathy (HCM).** HCM is an abnormal thickening of the heart muscle which can either be congenital (inherited) or happen due to overtraining. Unfortunately the blood vessels do not grow as fast as muscle tissues, which can prevent the overgrown muscle tissues of the heart from getting enough oxygen. During a particularly stressful situation this can lead to a sudden heart attack. **Congenital abnormalities of the coronary arteries** (arteries that supply blood to the heart) can also result in sudden heart attack when the person is under a lot of physical or emotional stress.

## Can a rapid heartbeat caused by anxiety result in a heart attack?

Yes, but only if there are morphological (structural) changes to the tissues of the heart. This can happen when the **coronary arteries** (arteries that supply blood to the heart’s tissues) **are partially blocked by plaque** or if there are some **congenital abnormalities of the coronary arteries**. Additionally, it can happen when the heart muscle grows too big for the coronary arteries to supply it with sufficient amount of blood, which can happen due to **Hypertrophic Cardiomyopathy**.

## Why is my heart beating rapidly when I’m nervous or anxious? Should I worry about this?

During stressful situations, stress hormones (cortisol and epinephrine) are released into the bloodstream in order to prepare you for whatever has caused you to be nervous or anxious. It is a completely normal and necessary reaction of a human body. If you wish to reduce your heart rate and calm down, there are two things you can do.

1. Breathe in deeply and hold your breath for 10-20 seconds. This causes a reflectory slowing down of the heart.
2. Close your eyes and place your palms over your eyes and apply gentle pressure. This also slows down your heartbeat.

## What causes chest pain?

Chest pain can be caused by a great number of reasons. Of course it is best to go to the doctor to identify the cause; however, sometimes a person is unable to do so right away. Generally, a person could be worried that there might be something wrong with their heart. In order to verify this here is what you can do: Ask someone (or do it yourself) to place their hands on the sides of your chest and gently compress your ribcage. If this increases your pain, then the pain is most likely caused by intercostal neuralgia (inflammation of the nerves between your ribs) or in much rarer cases - pleurisy. Alternatively, you can take a deep breath in. If this increases your pain, then most likely it has nothing to do with your heart.