



### IHSS

#### Patient Information

##### What is IHSS?

Idiopathic Hypertrophic Subaortic Stenosis or Hypertrophic Cardiomyopathy, as it is also known, is a heart condition that develops slowly. In the early stages, IHSS has few symptoms and for individuals affected, the first symptom may be sudden and life threatening.

IHSS causes the heart muscle to enlarge. The increased size can reduce blood flow to the brain and body. The enlarged heart can also cause irregular heart rhythms to occur.

The abnormal enlargement of the heart decreases its ability to relax and contract effectively when the heart beats.

Because of the increased size of the heart, 3 out of 4 cases of IHSS will also affect the function of the mitral valve.

##### Causes

The cause of IHSS is not clear. There is some evidence that it may be inherited. IHSS tends to occur more frequently in men. It is not uncommon to discover several members of the same family with IHSS. There are theories that IHSS occurs due to abnormal chemical activity at the cellular level during fetal development.

##### Diagnosis

IHSS is diagnosed by a variety of testing that is currently available. These include:

1. Chest X-ray
2. Electrocardiogram
3. Echocardiogram
4. Cardiac Catheterization

##### Symptoms

1. **Shortness of breath especially with exercise or stress.**  
*Cause:* There is increased demand on the heart to supply blood to body systems. Exercising the abnormal enlargement of the heart muscle and inability to contract and relax properly prevents adequate filling of the heart which decreases blood flow out of the heart causing it to back up into the lungs causing shortness of breath.
2. **Dizziness or feeling like you will pass out.**  
*Cause:* Increased demand on heart will decrease its ability to adequately fill as described above. When there is a sudden decrease in blood flow out to the body systems, the first affected is the brain. In response to low blood flow to the brain, you will experience dizziness or fainting. These symptoms can be aggravated with sudden changes in position especially lying to standing or sitting to standing.

##### 3. Chest pain / Angina

*Cause:* Increased demand on the heart muscle causes the enlarged heart muscle to contract and sustain contraction which compresses the coronary arteries which lie within and upon the heart muscle. Decreased blood supply to the heart muscle itself causes chest pain and can lead to heart muscle damage.

##### 4. Abnormal heart rhythms

*Cause:* With the abnormal development of heart tissue, the heart is not able to conduct electrical impulses normally. As a result, the disorganized muscle fibers are at increased risk for abnormal or irregular fast rhythms. Sometimes, with medications used to control the potential for fast rhythms, the heart rate can go too slow which is undesirable.

##### Treatment

Treatment of IHSS focuses on controlling the symptoms. There is no cure. Lifestyle changes include:

1. Avoiding strenuous activity.
2. Avoiding sudden position changes.
3. Reduction of stress / anxiety.
4. Learning to take your pulse.
5. Consistently taking prescribed medications.
6. If symptoms reoccur or become more frequent, such as chest pain, dizziness, or shortness of breath:
  - a. Stop what you are doing.
  - b. Lie down
  - c. Prop your feet up.
  - d. Notify your physician.

Regular office visits and follow-up to evaluate your response to medications and any changes in symptoms is essential to your well-being.

Other physicians and dentists not directly involved in your care need to be aware of your medical condition and current medications. Prophylactic antibiotic therapy may be necessary before any invasive procedures due to the potential for infection of the heart valves. This includes dental invasive procedures.

Other family members should have an echo-cardiogram to determine if they may also be affected by IHSS.

Another suggestion would be to wear a Medic-Alert bracelet.