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## **CONGESTIVE HEART FAILURE**

Congestive Heart Failure (CHF) is not a disease, but actually a syndrome, which can be caused by multiple different conditions affecting the heart. A list of the most common causes includes: coronary artery disease (blocked arteries causing heart attacks), high blood pressure, heart valve abnormalities, heart rhythm disturbances, and certain heart infections. There are, however, multiple other causes of CHF.

The syndrome of CHF is defined by symptoms and findings related to the heart's inability to function adequately as a pump. The heart receives blood returning from all over the body, and pumps it to the lungs to get refreshed with oxygen, and then to every organ and cell in the body to deliver that oxygen and nutrition. As the heart fails, two main things occur. First, it cannot pump out an adequate amount of blood to support the function of all the cells and organs, and second, it may not be able to keep up with all the blood it receives, causing a "back up" of blood and pressure.

Taking these two issues in turn, the failure to pump out adequate amounts of blood is dependent on how much blood is required by the body. This amount will vary depending on whether you are at rest, or active. The amount of blood needed for exercise may increase by 3 or even 4 fold. This may create a situation where people have no symptoms at rest, but may feel short of breath as they exert themselves. Shortness of breath with exertion is very common in CHF, though it may occur in other conditions, as well. In later stages, with more severe CHF, there may be shortness of breath at rest, as well as inadequate delivery of blood to vital organs such as the kidneys.

With respect to the "back up of blood and pressure, the most common symptoms relate to edema, or fluid retention. This is most common in the feet and lower legs. This location of edema is due to gravity. As the edema increases, it may rise higher into the legs, and even the abdomen. Ultimately fluid may accumulate in the lungs, adding to the shortness of breath. Patients may note difficulty lying down, and will often state that they have been sleeping upright in a chair, because they get short of breath if they lie down to sleep. Sometimes, with sudden increases in symptoms, patients may come to the ER unable to breath, and require emergency treatment.

Treatments are aimed at reducing the work requirements of the heart, making it easier for the heart to deliver adequate blood to the body. In addition, the use of medications (diuretics) to help the body get rid of the excess fluid, are very important. Patients may be asked to monitor their weight, ankle swelling and breathing status to aid in their treatment. Finally, if a correctable cause for the CHF can be found, specific treatment for that cause may be available.

For additional information, these websites may be helpful:

<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001211/>

<http://www.americanheart.org/presenter.jhtml?identifier=4585>

[http://en.wikipedia.org/wiki/Heart\\_failure](http://en.wikipedia.org/wiki/Heart_failure)

[http://www.medicinenet.com/congestive\\_heart\\_failure/article.htm](http://www.medicinenet.com/congestive_heart_failure/article.htm)