Summer 7-20-2016

The Pathophysiology of Heart Failure

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Recommended Citation
Tieu, Amber C., "The Pathophysiology of Heart Failure" (2016). Master of Science in Nursing (MSN) Student Scholarship. 165.
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**Significance of Pathophysiology (cont.)**

**Cardiac Remodeling**

Another compensatory mechanism of the heart (in efforts to maintain adequate CO) is cardiac remodeling. Cardiac remodeling is the transformation of the cardiac left ventricle to accommodate blood volumes in the heart at the end of diastole. At this first stretch leads to increase in contractile force (Frank-Starling Law). But eventually this mechanism eventually fails and results in decreased cardiac output, decreased SVR, and increased afterload.

**Neurohumoral System (Sympathetic Nervous System) Activation**

Anorexics respond to a diminished CO by increasing CO by stimulating the SNS. Activation of SNS promotes the maintenance of cardiovascular homeostasis by maintaining cardiac output (in the short run) and for adequate organ perfusion. Thus, it activates the “fight or flight” response. The heart rate increases, blood pressure increases, and vasoconstriction occurs.

**Implications for nursing care**

- The main goal is to treat the underlying cause, maximize CO, improve ventricular function, and treat the underlying cause, improve ventricular function, and treat the underlying cause in HF and only make symptoms more severe.

- Education of early warning signs should be discussed.

- Medications should be included as medication therapies should be taken to reduce symptoms in HF causes, which are categorized as systolic and diastolic HF.

- Impairments in left ventricular function, decreases cardiac pump function, and can cause cardiomegaly, increased pulmonary vascular pressures, and can improve gas exchange.

**References**

- Lewis, S. L., Dirksen, S. R., Heitkemper, M. M., 

