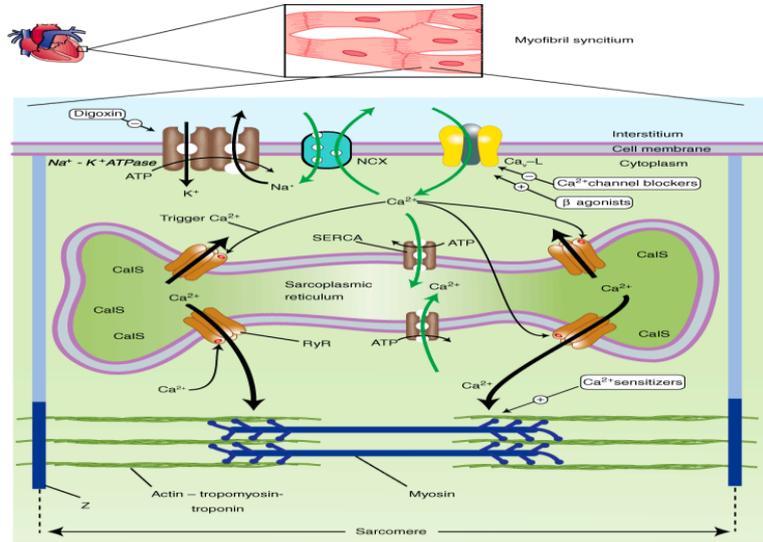


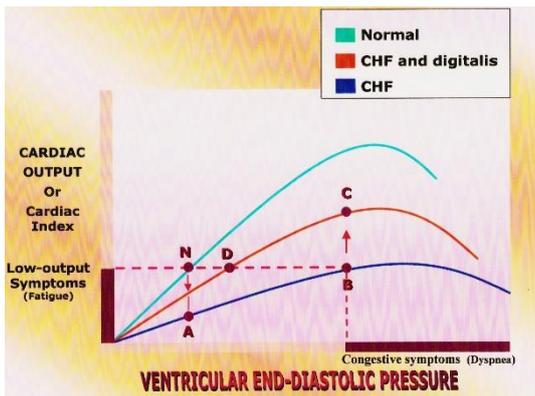
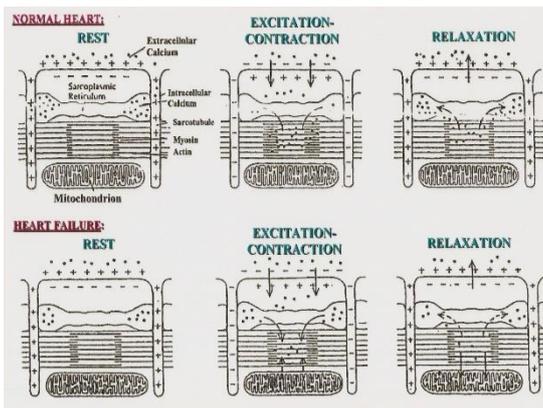
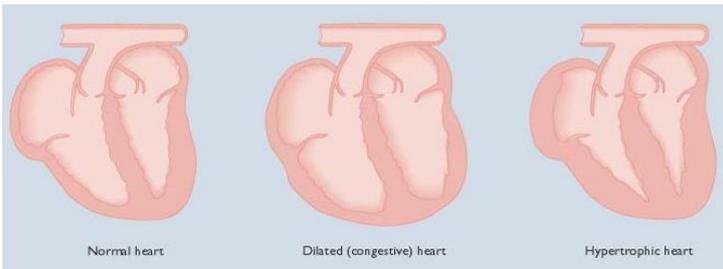
Classification and treatment of chronic heart failure	<table border="1"> <thead> <tr> <th>ACC/AHA Stage¹</th> <th>NYHA Class²</th> <th>Description</th> <th>Management</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Prefailure</td> <td>No symptoms but risk factors present³</td> <td>Treat obesity, hypertension, diabetes, hyperlipidemia, etc</td> </tr> <tr> <td>B</td> <td>I</td> <td>Symptoms with severe exercise</td> <td>ACEI/ARB, β blocker, diuretic</td> </tr> <tr> <td>C</td> <td>II/III</td> <td>Symptoms with marked (class II) or mild (class III) exercise</td> <td>Add aldosterone antagonist, digoxin; CRT, hydralazine/nitrate⁴</td> </tr> <tr> <td>D</td> <td>IV</td> <td>Severe symptoms at rest</td> <td>Transplant, LVAD</td> </tr> </tbody> </table>	ACC/AHA Stage ¹	NYHA Class ²	Description	Management	A	Prefailure	No symptoms but risk factors present ³	Treat obesity, hypertension, diabetes, hyperlipidemia, etc	B	I	Symptoms with severe exercise	ACEI/ARB, β blocker, diuretic	C	II/III	Symptoms with marked (class II) or mild (class III) exercise	Add aldosterone antagonist, digoxin; CRT, hydralazine/nitrate ⁴	D	IV	Severe symptoms at rest	Transplant, LVAD														
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Factors that May Precipitate Acute Decompensation in Patients with Chronic Heart Failure	<ul style="list-style-type: none"> -Dietary indiscretion -Discontinuation of HF therapy -Initiation of medications that worsen HF: <ul style="list-style-type: none"> Calcium antagonists (verapamil, diltiazem) /Beta blockers /Nonsteroidal anti-inflammatory drugs Antiarrhythmic agents [all class I agents, sotalol (class III)] /Anti-TNF antibodies -Alcohol consumption 	<ul style="list-style-type: none"> -Myocardial ischemia/infarction -Infection -Pregnancy -Worsening hypertension -Arrhythmias (tachycardia or bradycardia) -Anemia -Acute valvular insufficiency 																																	
Objectives of Long Term Management of Chronic Cardiac Failure	<ul style="list-style-type: none"> Improve cardiac performance (hemodynamics) at rest and during exercise . Relieve symptoms. Improve myocardial efficiency. Improve quality of life (particularly symptom-free and effort tolerance). Improve patient survival. 																																		
Cardiac vs Noncardiac Therapeutic Targets	<ul style="list-style-type: none"> -Conventional belief that the primary defect in HF is in the heart. -Reality is that HF involves many other processes and organs. -Research has shown that therapy directed at noncardiac targets is more valuable than cardiac targets. -CHF should be viewed as a complex, interrelated sequence of events involving hemodynamic, and neurohormonal events. 																																		
The Problems	<ul style="list-style-type: none"> Reduced force of contraction Decreased cardiac output Increased total peripheral resistance Inadequate organ perfusion Edema Decreased exercise tolerance Ischemic heart disease Sudden death Ventricular remodeling and decreased function 																																		
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Errors in Management of Heart Failure

- Missed diagnosis.
- Improper dosage of diuretics.
- Failure to assess quality of life.
- Failure to consider long term therapeutic goals.
- Underprescribing of ACEI.
- Use of potentially harmful drugs.
- Failure to use hydralazine-isosorbide combination which has proved evidence of benefit.



Heart Failure Pathophysiology



Compensatory Mechanisms in Heart Failure

