CIRCULATORY FAILURE

- The main function of circulation is perfusion of organs

$$BP = CO \times TPR$$

CIRCULATORY FAILURE

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CO decrease:

- ✓ lower volume in circulation – lower venous return
- ✓ vasodilatation of venous system
- ✓ lower pumping function of the heart

CIRCULATORY FAILURE

$$BP = CO \times TPR$$

TPR decrease:

- ✓ toxic vasodilatation
- ✓ Dysbalance of autonomy nervous system – sympathetic part – decrease of sympathetic tone of vessels

New**Y**ork **H**eart **A**ssociation (**NYHA**) classification

Functional Capacity	Objective Assessment
Class I	Patients with cardiac disease but without resulting limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitations, dyspnea, or anginal pain.
Class II	Patients with cardiac disease resulting in slight limitation of physical activity. They are comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea, or anginal pain.
Class III	Patients with cardiac disease resulting in marked limitation of physical activity. They are comfortable at rest. Less than ordinary activity causes fatigue, palpitation, dyspnea, or anginal pain.
Class IV	Patients with cardiac disease resulting in inability to carry on any physical activity without discomfort. Symptoms of heart failure or the anginal syndrome may be present even at rest. If any physical activity is undertaken, discomfort is increased.

Source: Adapted from New York Heart Association, Inc., *Diseases of the Heart and Blood Vessels: Nomenclature and Criteria for Diagnosis,* 6th ed. Boston, Little Brown, 1964, p. 114.