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Exercise and noise exposure causes temporary hearing loss. Yet, a direct relationship may excist between cardiovascular health and hearing *(Manson, 1994).*

Gates, (1993) studied, the relation of hearing in the elderly to the presence of cardiovascular disease and cardiovascular risk factors.

Textbooks commonly define heart failure as a condition in which the heart cannot pump an adequate supply of blood at normal filling pressure meet the metabolic needs of the body *(Smith, 1995).*

Venous hypertension:

As the ejection fraction falls and the ventricle fails to empty properly during systole, the volume time of unexpelled blood increases with an accompanying increase in diastolic pressure in the ventricles and in the atria and proximal veins. Other elements that contribute to the venous hypertension include

(1) increased tone in venous capacitance vessels;

(2) blood volume expansion as a consequence of renal sodium and water retention; and, on occasion

(3) incompetence of mitral or tricuspid valves with regurgitation of blood from ventricle to atrium as the valve becomes incompetent from intrinsic valvular disease, papillary muscle dysfunction, ventricular dilation, and inadequate closure during an arrhythma ***(Smith, 1995)***

The term acoustic admittance as applied to the ear describes the mobility of the vibrating structures. Strictly it is the ratio of the velocity of the middle ear displacement to the applied sound pressure ***(Lutma, 1997).***

The acoustic impedance depends upon three factors: resistance, stiffness reactance and mass reatance The resistance is due to friction between the different parts of the transmitting mechanism which consists of the ligaments of the ossicles and the middle ear muscles. ***(Jerger , 1970)***