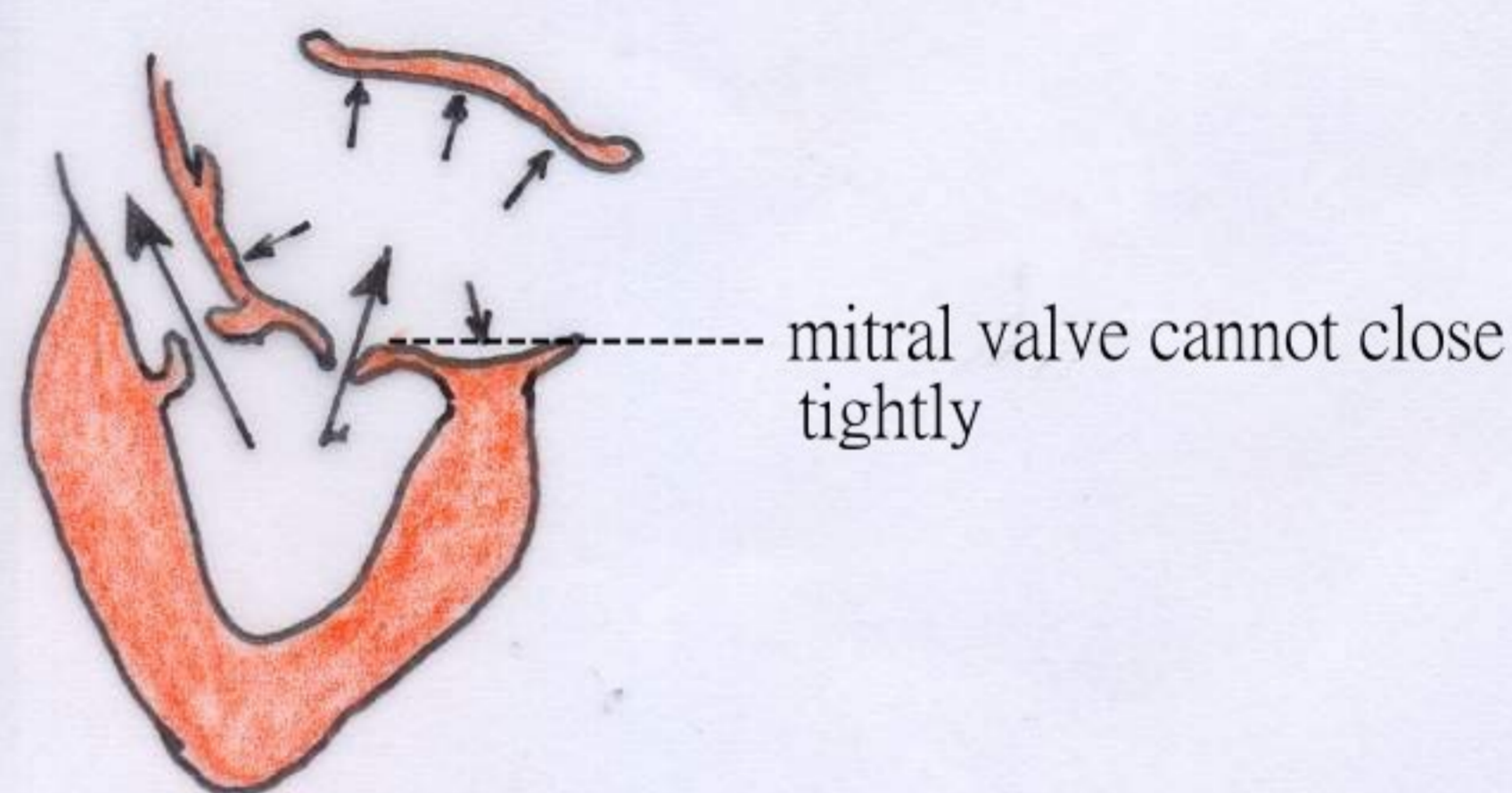
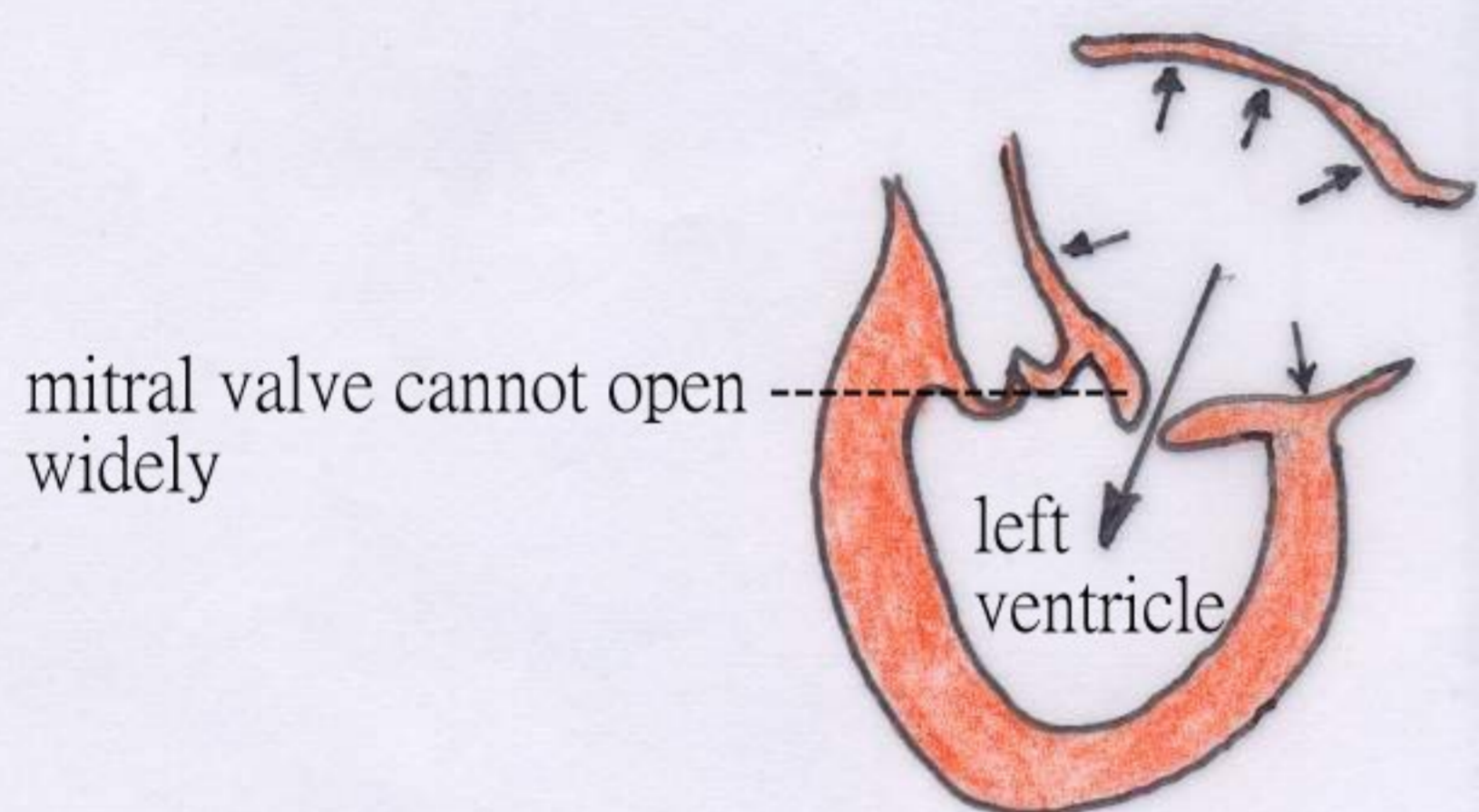


Valvular heart disease

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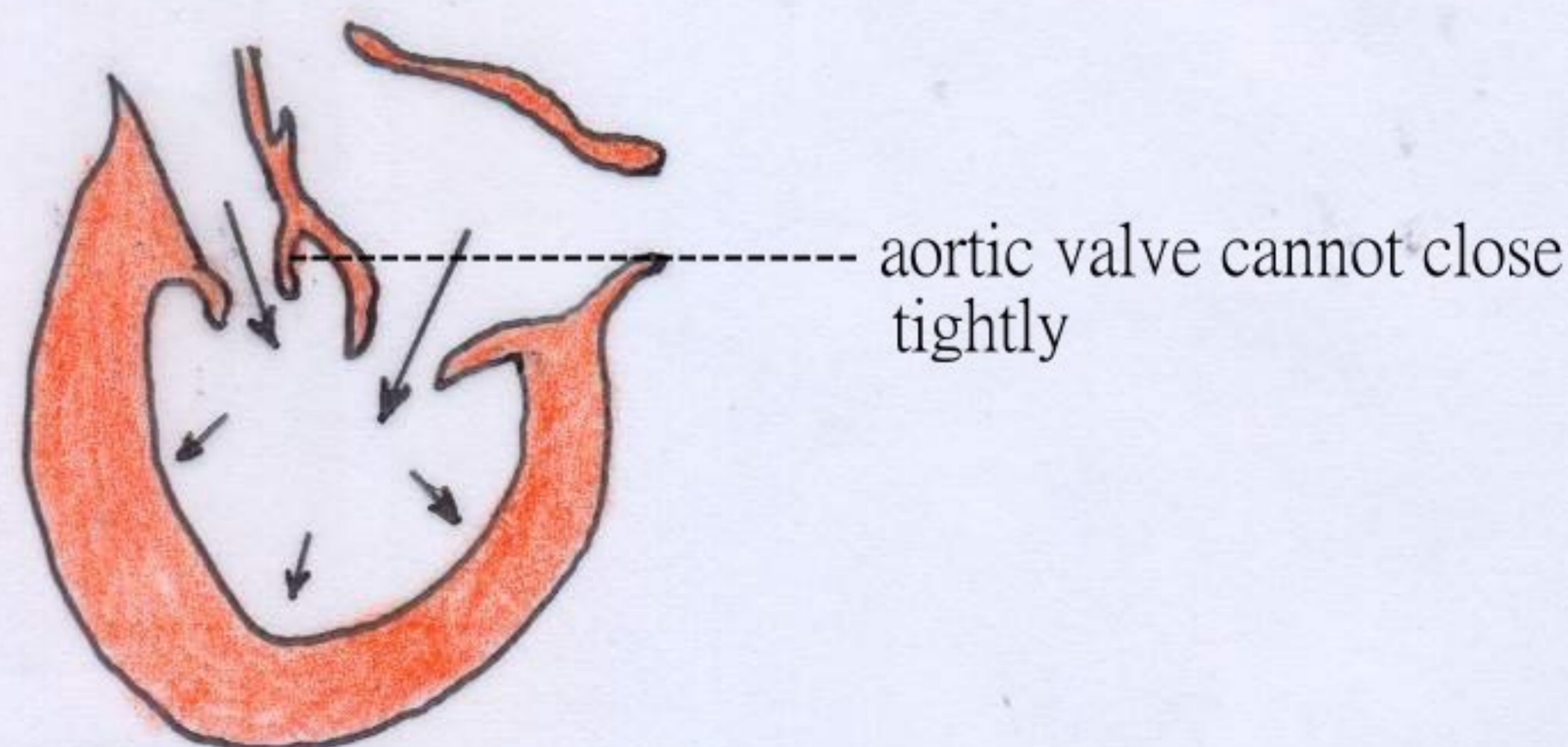
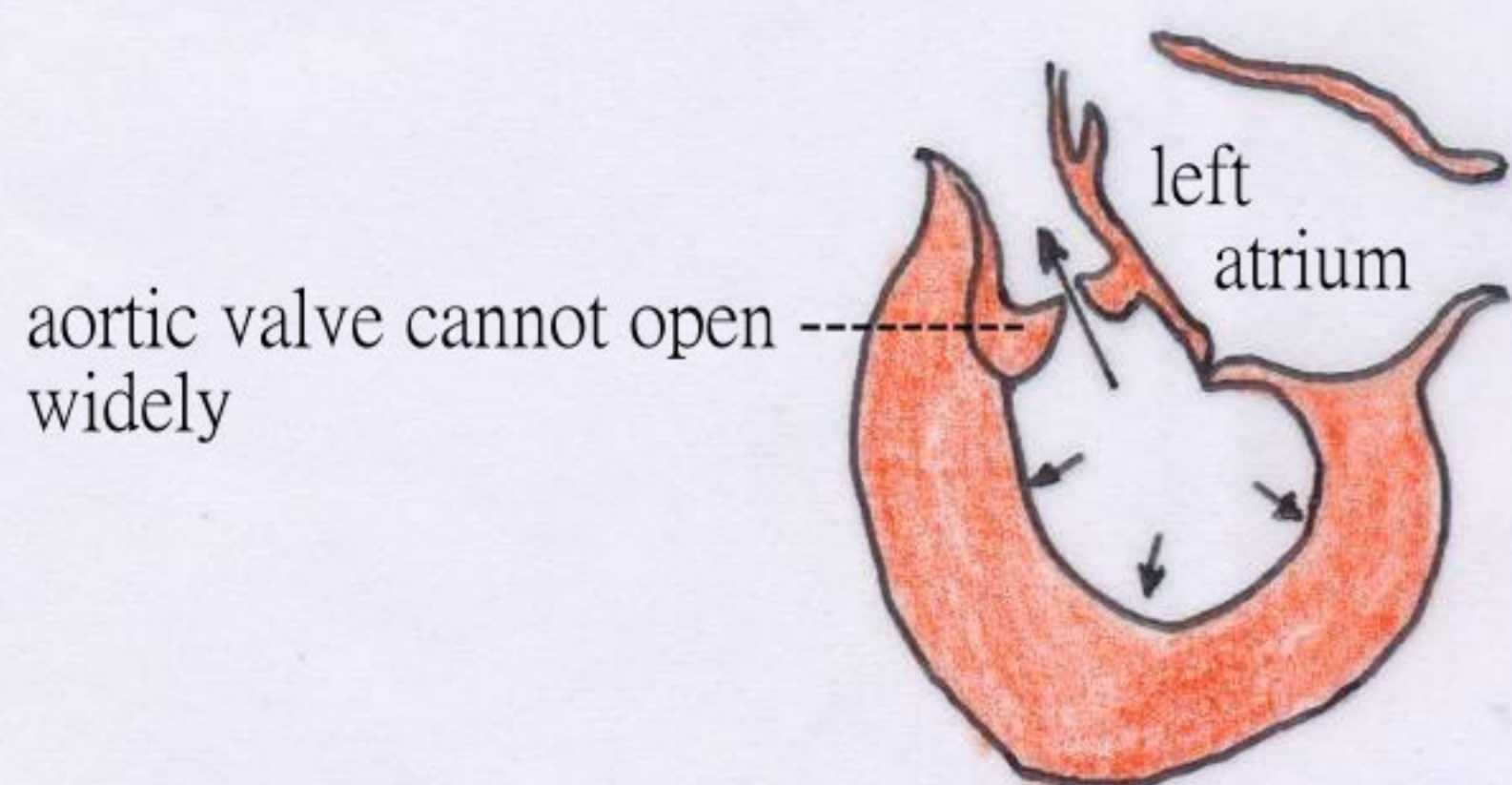
Heart has left and right atria and ventricles. Heart valves are present at outlets of atria and ventricles, directing blood flow of heart. When heart contracts (systole), aortic and pulmonary valves open while mitral and tricuspid valves close. When heart relaxes (diastole), aortic and pulmonary valves close while mitral and tricuspid valves open. Therefore normal pumping action of heart (systole and diastole) depends on normal open-and-close action of heart valves. Abnormal valvular functions --> valvular heart disease.

Major valvular heart disease = (1) valvular stenoses, (2) valvular regurgitation and (3) combined valvular stenoses and regurgitation. As follows:-



Mitral valve stenosis (diastole) --> decreased flow from left atrium to ventricle --> increased atrial pressure --> atrial enlargement, atrial fibrillation and arrhythmias, pulmonary edema, heart failure, thromboembolism.

Mitral valve regurgitation (systole) --> blood regurgitation from left ventricle to atrium --> atrial enlargement, atrial fibrillation and arrhythmias, decreased cardiac output, heart failure.



Aortic stenosis (systole) --> decreased flow from left ventricle to aorta --> heart hypertrophy, decreased cardiac output, heart failure, thromboembolism

Aortic regurgitation (diastole) --> blood regurgitation from aorta to left ventricle --> heart hypertrophy and dilatation, decreased cardiac output, heart failure