CHAPTER 28: DISEASES OF THE CIRCULATORY SYSTEM

Exercise 28.1

1. Mitral regurgitation  I34.0

2. Mitral valve stenosis with congestive heart failure  I05.0  I50.9

3. Severe mitral stenosis and mild aortic insufficiency  I08.0

4. Aortic and mitral insufficiency  I08.0
   Persistent atrial fibrillation  I48.1

5. Mitral insufficiency, congenital  Q23.3

6. Mitral valve insufficiency with aortic regurgitation  I08.0

7. Chronic aortic and mitral valve insufficiency, rheumatic, with acute congestive heart failure due to rheumatic heart disease  I08.0  I09.81  I50.9

Exercise 28.2

1. Crescendo angina due to coronary arteriosclerosis  I25.110
   Right and left cardiac catheterization, percutaneous  4A023N8

2. Angina pectoris with essential hypertension  I20.9  I10

Exercise 28.3

1. A patient felt well until around 10:00 p.m., when he began having severe chest pain, which continued to increase in severity. He was brought to the emergency department by ambulance. There was no previous history of cardiac disease, but the EKG showed an acute posterolateral myocardial infarction, and the patient was admitted immediately for further care.  I21.29

2. A patient with compensated congestive heart failure on Lasix began to have extreme difficulty in breathing and was brought to the  I21.19  I50.9
emergency department, where he was found to be in congestive failure. Because it was felt that an impending infarction was possible, a percutaneous transluminal coronary angioplasty (PTCA) was performed, but the patient went on to have an acute inferolateral infarction.

3. A patient was admitted with acute myocardial infarction involving the left main coronary artery with no history of previous infarction or previous care for this episode. A week later during the hospital stay, he also experienced an acute anterolateral infarction.

4. A patient was admitted to Community Hospital with severe chest pain, which was identified as an acute anterolateral wall infarction (no history of earlier care). Patient was transferred to University Hospital two days later for angioplasty, returned to Community Hospital after three days at University to continue recovery, and stayed for four days.
   Code for first admission to Community Hospital I21.09
   Code for transfer to University Hospital I21.09
   Code for transfer back to Community Hospital I21.09

5. The patient in the situation described in item 4 above was readmitted to Community Hospital a week later because he was having severe chest pains and was diagnosed with a new inferior wall MI.

Exercise 28.4

1. Acute myocardial infarction, inferolateral wall I21.19
   Third-degree atrioventricular block I44.2

2. Acute myocardial infarction of inferoposterior wall I21.11
   Congestive heart failure I10
   Hypertension I10

3. Impending myocardial infarction (crescendo angina) resulting in occlusion of coronary artery I24.0

4. Acute coronary insufficiency I24.8
5. Hemopericardium as a complication of acute myocardial infarction of the inferior wall, which occurred three weeks ago. Patient had been discharged a week before.

Exercise 28.5

1. Occlusion of right internal carotid artery with cerebral infarction with mild hemiplegia resolved before discharge

2. Hemiplegia on right (dominant) side due to old cerebral thrombosis with infarction

3. Admission for treatment of new cerebral embolism with cerebral infarction and with aphasia remaining at discharge (patient suffered cerebral embolism with infarction one year ago, with residual apraxia and dysphagia)

4. Cerebral infarction due to thrombosis with right hemiparesis (dominant) and aphasia

5. Cerebral embolism right anterior cerebral artery

6. Insufficiency of vertebrobasilar arteries

7. Admission for rehabilitation because of monoplegia of the right arm and right leg, each affecting dominant side (patient suffered a nontraumatic extradural (intracranial) hemorrhage one month ago)

8. Quadriplegia due to ruptured berry aneurysm five years ago

Exercise 28.6 (numbers 1-5)

1. Left heart failure with hypertension

2. Hypertensive cardiomegaly
3. **Congestive heart failure**
   - Cardiomegaly
   - Hypertension

4. **Acute congestive diastolic heart failure due to hypertension**

5. **Hypertensive heart disease**
   - Myocardial degeneration

**Exercise 28.7 (numbers 1-5)**

1. Stasis ulcer, left lower extremity
   - Left lesser saphenous vein stripping
   (percutaneous)

2. Chronic venous embolism and thrombosis of subclavian veins on long-term Coumadin therapy
   - Chronic orthostatic hypotension

3. Arteriosclerosis of legs with intermittent claudication

4. Septic embolism pulmonary artery due to *Staphylococcus Aureus* sepsis
   - Saphenous phlebitis, right leg

5. Pulmonary hypertension

**Exercise 28.8 (numbers 1-4)**

1. A patient was admitted through the emergency department complaining of chest pain with radiation down the left arm increasing in severity over the past three hours. Initial impression was impending myocardial infarction, and the patient was taken directly to the surgical suite, where percutaneous transluminal angioplasty with insertion of coronary stent was carried out on the right coronary artery. Infarction was aborted, and the diagnosis was listed as acute coronary insufficiency.
2. **Atherosclerosis** of previous coronary artery bypass graft with unstable angina. Right greater saphenous vein graft was used to bring blood from the aorta to the right coronary artery, the left coronary artery, and the left anterior descending artery. Intraoperative continuous pacing pacemaker was used during the procedure as well as extracorporeal circulatory assistance. Pacemaker leads were inserted in left atria and ventricle

3. **Occlusion** of the right coronary artery. Right and left diagnostic cardiac catheterization

4. A patient with known native vessel coronary atherosclerosis and unstable angina underwent percutaneous balloon angioplasty carried out on three coronary arteries with vessel bifurcation. Insertion of two stents. Extracorporeal circulation (continuous cardiac output)

**Exercise 28.9 (numbers 1-7)**

1. Second degree prolapsed hemorrhoids
   Hemorrhoidectomy by cryosurgery (open)

2. Painful varicose veins, right lower leg
   Right greater saphenous ligation and stripping for varicosities, open

3. Mitral stenosis and aortic insufficiency
   Atrial fibrillation
   Hypertension

4. Abdominal aortic aneurysm
   Hypertensive cardiovascular disease essential
   Resection of abdominal aortic aneurysm with synthetic graft replacement, percutaneous endoscopic approach

5. Acute myocardial infarction, anterior wall

6. Renovascular hypertension secondary to fibromuscular hyperplasia, right
renal artery
Nuclear renal scan with Tc-99m

7. Congestive heart failure due to hypertensive heart disease