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

Code for transfer to University Hospital

Code for transfer back to Community Hospital

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

Third-degree atrioventricular block

2. Acute myocardial infarction of inferoposterior wall

Congestive heart failure

Hypertension

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

4. Acute coronary insufficiency
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 I63.231 G81.90

2. Hemiplegia on right (dominant) side due to old cerebral thrombosis with infarction I69.351

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) I69.390 I69.391

4. Cerebral infarction due to thrombosis with right hemiparesis (dominant) and aphasia I63.30 G81.91 R47.01

5. Cerebral embolism right anterior cerebral artery I66.11

6. Insufficiency of vertebrobasilar arteries G45.0

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) I69.231 I69.241

8. Quadriplegia due to ruptured berry aneurysm five years ago I69.065 G82.50

**Sequelae**

**Exercise 28.6 (numbers 1-5)**

1. Left heart failure with hypertension I50.1 I10

2. Hypertensive cardiomegaly I11.9
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

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.

   **Bypass**

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)**


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


5. Acute myocardial infarction, anterior wall I21.09

6. Renovascular hypertension secondary to fibromuscular hyperplasia, right renal artery I77.3 I15.0
   Nuclear renal scan with Tc-99m CT131ZZ

7. Congestive heart failure due to hypertensive heart disease I11.0 I50.9