CHAPTER 28: DISEASES OF THE CIRCULATORY SYSTEM

Exercise 28.1

1. Mitral regurgitation

2. Mitral valve stenosis with congestive heart failure

3. Severe mitral stenosis and mild aortic insufficiency

4. Aortic and mitral insufficiency
   Persistent atrial fibrillation

5. Mitral insufficiency, congenital

6. Mitral valve insufficiency with aortic regurgitation

7. Chronic aortic and mitral valve insufficiency, rheumatic, with acute congestive heart failure due to rheumatic heart disease

Exercise 28.2

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.

2. A patient with compensated congestive heart failure on Lasix began to have extreme difficulty in breathing and was brought to the 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.

   Code for readmission to Community Hospital  I22.1
   Code for initial admission to Community Hospital  I21.09

Exercise 28.3

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  I50.9
   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.

   Code for hemopericardium  I23.0
   Code for myocardial infarction of inferior wall  I21.19
Exercise 28.4.

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 28.5

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  I69.351

3. Admission for treatment of new cerebral embolism  I63.40
   with cerebral infarction and with aphasia remaining at discharge (patient suffered cerebral embolism one year ago, with residual apraxia and dysphagia)  I69.391
   \textbf{Sequelae}

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 hemorrhage one month ago)  I69.231
   I69.241
   \textbf{Sequelae}

8. Quadriplegia due to ruptured berry aneurysm five years ago  I69.065
   G82.50
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
   I51.7
   Hypertension
   I10

4. Acute congestive diastolic heart failure due to hypertension
   I11.0
   I50.31

5. Hypertensive heart disease
   Myocardial degeneration
   I11.9

Exercise 28.7 (numbers 1-5)

1. Bleeding third degree hemorrhoids
   Stasis ulcer, left lower extremity
   Hemorrhoidectomy
   K64.2
   I83.029,
   L97.929
   06BY0ZC

2. Chronic venous embolism and thrombosis of subclavian veins on long-term Coumadin therapy
   Chronic orthostatic hypotension
   I82.B23
   Z79.01
   I95.1

3. Arteriosclerosis of legs with intermittent claudication
   I70.213

4. Septic embolism pulmonary artery due to Staphylococcus Aureus sepsis
   Saphenous phlebitis, right leg
   A41.01
   I26.90
   I80.01

5. Pulmonary hypertension
   I27.2
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. 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 pacemaker was used during the procedure as well as extracorporeal circulatory assistance.

3. Right and left diagnostic cardiac catheterization

4. 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

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  I21.09

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

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