ICD-10-CM Coding Workbook for Cardiology

Specialty coding guidance for ICD-10-CM

2016

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Case Study #28—Aortic Aneurysm

1. Assign the appropriate ICD-1Ø-CM diagnosis code for the condition that preceded surgery:

a. I77.811 Abdominal aortic ectasia

b. I71.Ø2 Dissection of abdominal aorta

c. I71.4 Abdominal aortic aneurysm, without rupture

d. S25.Ø9XA Other specified injury of thoracic aorta, initial encounter

An aortic aneurysm can develop when the wall of the artery is weakened and becomes distended like a balloon. They are further defined by the location in the body where they occur, such as the upper part of the aorta which is in the chest, or the lower part of the aorta in the abdomen. When the aneurysm spans both areas, it is referred to as thoracoabdominal. Both types may rupture if they become too large and the massive bleeding that can occur is life-threatening. ICD-1Ø-CM also classifies the location of the aortic aneurysm based on the location in the thorax or abdomen. The condition is further classified by the status of the aneurysm as ruptured or not. Dissection of the aorta occurs when the inner layer of the aortic wall tears, causing the layers to separate. Aortic aneurysms may be round (saccular) or tube-shaped (fusiform). Motor vehicle accidents and falls may also cause damage to the aorta and result in an aneurysm. While an arterial aneurysm is generally defined as arterial dilation of greater than 5Ø percent of the normal diameter, the term "ectasia" is defined as arterial dilatations of less than 5Ø percent of the normal diameter of the vessel.

2. Which of the following are risk factors for AAA?

a. Age over 65

b. Smoking

c. Hypertension

d. Both a and c

e. All of the above

Risk factors for AAA include those greater than 65 years of age, a history of smoking, and hypertension. Other risk factors include peripheral atherosclerotic vascular disease and chronic obstructive pulmonary disease (COPD). Other less common causes are Ehlers-Danlos and Marfan syndromes, collagen vascular diseases, and a first degree relative with AAA.

3. Assign the appropriate ICD-1Ø-CM diagnosis code(s) for this patient's diabetes mellitus.

a. E11.9 Type 2 diabetes mellitus without complications

b. E11.69 Type 2 diabetes with other specified complication

c. E13.59 Other specified diabetes mellitus with other circulatory complications

d. E11.9 Type 2 diabetes mellitus without complications; Z79.4 Long term (current) use of insulin

While diabetes mellitus is a risk factor for AAA, a cause and effect relationship between the two conditions cannot be assumed, especially since the patient has several other risk factors as well. It is not unusual for diabetic patients undergoing surgery to require temporary administration of insulin postoperatively. ICD-1Ø-CM specifically addresses the temporary use of insulin by a diabetic patient in guideline Section I.C.4.a.3, which directs coders not to assign code Z79.4 when the use of insulin is only temporary to bring the patient's blood sugar under control during an encounter. For that reason, it would not be reported in this scenario.

4. Assign the appropriate ICD-1Ø-CM codes for this patient's COPD and smoking history.

a. J44 Other chronic obstructive pulmonary disease; Z87.891 Personal history of nicotine dependence

b. J44.1 Chronic obstructive pulmonary disease with (acute) exacerbation; Z79.51 Long term (current) use of inhaled steroids; Z87.891 Personal history of nicotine dependence

c. J98.8 Other specified respiratory disorders; Z87.891 Personal history of nicotine dependence

d. J44.9 Chronic obstructive pulmonary disease, unspecified; F17.211 Nicotine dependence, cigarettes, in remission

The code for chronic obstructive pulmonary disease is found in the ICD-1Ø-CM alphabetic index under main term "Disease, diseased" and subterms "pulmonary," "chronic obstructive," and "with exacerbation (acute)," which reference J44.1. This code most completely identifies the patient's condition. Since category J44 requires a fourth character for completion, it is not appropriate to report it with three characters. The patient is documented to be on Advair for his COPD, which is a combination of a synthetic corticosteroid and a beta agonist that relaxes bronchial smooth muscle and inhibits the release of hypersensitivity mediators. Therefore, it is appropriate to report his long-term use of inhaled steroids. Lastly, since the patient has a history of smoking, it is appropriate to report a personal history of nicotine dependence, as indicated in ICD-1Ø-CM guideline Section I.C.21.c.4. Although the patient no longer smokes, the condition has the potential to recur and impact treatment of any current conditions.