Classification of Coagulopathy

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The term coagulopathy can be confusing for coding professionals because it may refer to a myriad of conditions that are classified differently in ICD-9-CM. Take for example a patient who has bleeding somewhere (e.g., hematuria or epistaxis). The physician lists "coumadin coagulopathy" as the diagnosis. No procedure was performed to control the bleeding; the patient was simply treated with vitamin K and fresh frozen plasma.

The thrust of the treatment appears to be for the coagulopathy, but the treatment resolved the bleeding. What is the principal diagnosis code in this case? The bleeding, which may be a symptom code? The so-called "coagulopathy?" Or perhaps the underlying condition that necessitated anticoagulation therapy in the first place? This article will address correct coding in this circumstance and explain coagulopathy and the effects of anticoagulation therapy.

What Is Coagulopathy?

Coagulopathy describes bleeding disorders ranging from common, anticipated adverse effects of anticoagulant therapy to true pathologic hemorrhagic disorders. Normal blood coagulation is a complex process involving as many as 20 different plasma proteins, known as blood-clotting or coagulation factors.

When certain coagulation factors are deficient or missing, the process is impaired. Some bleeding disorders are present at birth and caused by rare inherited disorders. Others are developed during certain illnesses (such as vitamin K deficiency or severe liver disease) or treatments (such as use of anticoagulant drugs or prolonged use of antibiotics).[1] Coagulopathy may refer to any one of these etiologies.

Confusion ensues in the coding process because ICD-9-CM differentiates coagulopathies directly related to a disease process from coagulopathies related to anticoagulation therapy. The first are typically classified to code category 286 (Coagulation Defects), while the latter are classified according to the adverse effect or poisoning coding guidelines. Correct code assignment requires that coding professionals determine to which condition the physician is referring.

In the case described above, the patient's condition is related to the anticoagulant therapy. A presumption of the presence of a coagulation defect, classified to category 286, would be incorrect.

What Are Anticoagulants?

Coders should be familiar with commonly prescribed anticoagulant medications (see the table below). It is equally important that coders are aware of the difference between anticoagulants and thrombolytic drugs. An anticoagulant is a medication that prevents blood from clotting. A thrombolytic medication is one that is capable of breaking a clot apart.

The term circulating anticoagulants often causes confusion for coding professionals. This term actually refers to substances, usually antibodies, naturally produced by the body for the purpose of inhibiting coagulation. The term does not refer to the anticoagulant medications listed in the table below.

Code 286.5, Hemorrhagic disorder due to intrinsic circulating anticoagulants, is often assigned incorrectly due to the confusion with anticoagulant medications. Code 286.5 is reserved for patients who have disease processes that generate circulating anticoagulants, rather than those who have the anticoagulants administered for therapeutic purposes.

Coding Coagulation Disorders

Two coagulation disorders classified to code 286.5 are hemophilia and systemic lupus erythematosus (SLE) inhibitor. Most people are aware of the hereditary forms of hemophilia; however, hemophiliac conditions can also be acquired.

Clotting factors are produced in the liver, circulating in the plasma fraction of the blood, and are responsible for blood clotting. Acquired hemophilia occurs when antibodies to clotting factors form, thus blocking the function of these factors. These antibodies, such as anti-VIIIa, anti-IXa, anti-Xa, anti-XIa, and antithrombin, may increase in postpartum women, who may have an underlying systemic autoimmune disease or hypersensitivity reaction to a medication. Secondary hemophilia may also occur in patients who have multiple myeloma, leukemia, or other malignant conditions of the hematologic system.[2]

The SLE inhibitor, also known as lupus anticoagulant, is a circulating anticoagulant common in patients who have SLE. It has also been found in patients with other nonrelated disease processes, such as HIV, scleroderma, and some cancers. In children and occasionally in adults, lupus anticoagulants may follow a viral-type syndrome. Medications, including chlorpromazine, procainamide, phenytoin, penicillin, and other drugs, are also causative agents for formation of the lupus anticoagulant protein.[3]

Case Studies

Code assignment for these disorders is fairly straightforward. Take the following example:

Example 1: A patient is seen at the bleeding disorders clinic. The diagnosis for the encounter is multiple myeloma with secondary hemophilia. The correct coding and sequencing for this scenario is:

- 203.00, Multiple myeloma without mention of remission
- 286.5, Hemorrhagic disorder due to intrinsic circulating anticoagulants

Coding Coumadin Coagulopathy

Bleeding disorders resulting from anticoagulant therapy are classified in ICD-9-CM as either a poisoning or adverse effect. To reduce the misuse of codes from category 286, code 790.92, Abnormal coagulation profile, was created for fiscal year 1994. This code is used to report patients on anticoagulation therapy with prolonged prothrombin time (PT)/partial thromboplastin time without a specific effect, such as a hemorrhage.[4] A prolonged prothrombin time is an expected result of anticoagulation therapy. Thus an increased risk for bleeding is a side effect associated with anticoagulant therapy. Code E934.2, Agents primarily affecting blood constituents, anticoagulants, is used only when there is an adverse effect documented.[5]

The ICD-9-CM Official Guidelines for Coding and Reporting include guidelines for adverse effects and poisonings.[6] When the anticoagulant therapy is correctly prescribed and properly administered, but a patient experiences an adverse effect, the effect (elevated PT, hematuria, epistaxis) is coded followed by code E934.2. If an error was made in administering the anticoagulant, whether by the care provider or the patient, poisoning code 964.2 is assigned followed by code for the effect and the E code to denote the cause of the poisoning.

Example 2: A patient with a history of atrial fibrillation who is on Coumadin is admitted for epistaxis. The patient receives vitamin K and fresh frozen plasma. The diagnosis is listed as “epistaxis secondary to Coumadin coagulopathy.” The correct coding and sequencing for this scenario is:

- 784.7, Epistaxis
- E934.2, Agents primarily affecting blood constituents, anticoagulants
- 427.31, Atrial fibrillation
- V58.61, Long-term (current) drug use of anticoagulants[7]

Example 3: A patient is admitted with an extremely elevated PT. The patient is on Coumadin prophylaxis for atrial fibrillation and was confused about which pill to take; as a result she inadvertently doubled her Coumadin medication. The patient is treated with fresh frozen plasma. The correct coding and sequencing for this scenario is:

- 964.2, Poisoning by agents primarily affecting blood constituents, anticoagulants
- 790.92, Abnormal coagulation profile
- E858.2, Accidental poisoning by other drugs, agents primarily affecting blood constituents

- 427.31, Atrial fibrillation
- V58.61, Long-term (current) drug use of anticoagulants[8]

Example 4: A patient is admitted with an elevated PT. The patient is on Coumadin prophylaxis for atrial fibrillation. There is no documentation to suggest that the medication was not taken as prescribed nor is a specific bleeding disorder documented. The patient is treated with fresh frozen plasma. The correct coding and sequencing for this scenario is:

- 790.92, Abnormal coagulation profile
- E934.2, Agents primarily affecting blood constituents, anticoagulants
- 427.31, Atrial fibrillation
- V58.61, Long-term (current) drug use of anticoagulants[9]

Coding Anticoagulant Therapy

When no adverse effect is documented, code assignment for patients on anticoagulant therapy is fairly straightforward. Code V58.61, Long-term (current) use of anticoagulants, is reported to reflect that the patient is on anticoagulant therapy. If the reason for the encounter is for monitoring the effectiveness or toxicity of the medication, code V58.83, Encounter for therapeutic drug monitoring, is assigned.[10]

Example 5: A patient presents to the clinical laboratory for a protime test. The diagnosis written on the physician order is "atrial fibrillation and Coumadin therapy." The correct coding and sequencing for this scenario is:

- V58.83, Encounter for therapeutic drug monitoring
- V58.61, Long-term (current) drug use of anticoagulants
- 427.31, Atrial fibrillation

Coagulopathy can be a confusing condition for coding professionals as it refers to a myriad of conditions that are classified differently in ICD-9-CM. The key to correct code assignment is to determine what condition the physician is actually referring to and then follow the official coding guidelines.

Commonly Prescribed Medications	
Anticoagulant Medications	**Thrombolytic Medications (Drug Names in Parentheses)**
• Argatroban • Coumadin • Heparin • Lepirudin • Warfarin	• Urokinase (Abbokinase) • Alteplase (Activase) • Anisoylated purified streptokinase activator complex (APSAC) • Prourokinase (Saruplase) • Reteplase (Retavase) • Streptokinase (Streptase) • Tissue plasminogen activator (t-PA)
Source: Hardman, Joel Griffith, Lee E. Limbird, and Alfred G. Gilman. *Goodman and Gilman's the Pharmacological Basis of Therapeutics,* 10th ed. McGraw-Hill, 2001.	

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Notes

1. MedlinePlus Medical Encyclopedia. "Bleeding Disorders." Available online at www.nlm.nih.gov/medlineplus/ency/article/001304.htm.

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4. American Hospital Association (AHA). Coding Clinic for ICD-9-CM 9, no. 2. Third quarter, 1992.
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8. AHA. *Coding Clinic for ICD-9-CM* 11, no. 1. First quarter, 1994.
9. Ibid.
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