

**INGENIX®**

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Coders' Desk Reference for  
**Cardiology**  
**Diagnoses**

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# Introduction

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The *Ingenix 2010 Coders' Desk Reference for Cardiology Diagnoses* is a referential tool designed to assist with accurate code assignment for cardiovascular services by providing a brief, easy-to-understand clinical background of common cardiovascular diagnoses. The goal is to enrich the user's clinical understanding of ICD-9-CM, so code selection becomes more accurate.

To prepare for the transition to ICD-10-CM, education is essential. ICD-10-CM is a further evolution of ICD-9-CM, but with a new, enhanced format and far greater clinical specificity than in the current diagnostic coding system. This new level of specificity requires an even greater degree of clinical understanding on the part of the coder to assign the correct diagnostic codes in order to properly represent the patient and support the services provided.

Because this book does not include the comprehensive index found in the official ICD-9-CM, it does not replace use of an official code book or encoding tool. However, the *2010 Coders' Desk Reference for Cardiology Diagnoses* provides an essential tool to understanding the "why" behind ICD-9-CM diagnostic code assignments common to the cardiovascular specialty.

## Format

The *Ingenix 2010 Coders' Desk Reference for Cardiology Diagnoses* begins with the ICD-9-CM conventions, ICD-9-CM coding guidelines, and common abbreviations. It then follows the organization of ICD-9-CM, including diseases and disorders common to cardiovascular services in numeric order. Common V code supplemental classifications are included, as well.

Illustrations are included with certain featured codes to enhance the user's understanding of the anatomic structures associated with a specific code or common procedures used to treat the condition. The illustrations are simplified schematic representations intended to provide a visual link between terminology used in association with the diagnostic code. In many instances, certain anatomic detail may be eliminated for clarity. The appendix presents additional related or nonspecialty clinical diagnostic code information in a less comprehensive format.

The basic format of the book is to provide clinical coding support, with illustrations, narrative, and other coding resources that are designed to assist the coder in understanding these specialty-specific diagnostic codes.

## 434.00-434.91

- 434.00 Cerebral thrombosis without mention of cerebral infarction**
- 434.01 Cerebral thrombosis with cerebral infarction**
- 434.10 Cerebral embolism without mention of cerebral infarction**
- 434.11 Cerebral embolism with cerebral infarction**
- 434.90 Unspecified cerebral artery occlusion without mention of cerebral infarction**
- 434.91 Unspecified cerebral artery occlusion with cerebral infarction**

### Lay Description

This category identifies conditions that cause blockage of cerebral arteries. Cerebral thrombosis and embolism are the most common causes of cerebral infarctions or strokes, accounting for about 75 percent. Cerebral thrombosis indicates blood clot formation within one of the vessels that supplies the brain with oxygenated blood, preventing normal function. Cerebral embolism indicates a blood clot that formed initially somewhere else within the body, then traveled to the vessels of the brain causing blockage that restricts essential nutrients and blood flow to part of the brain.

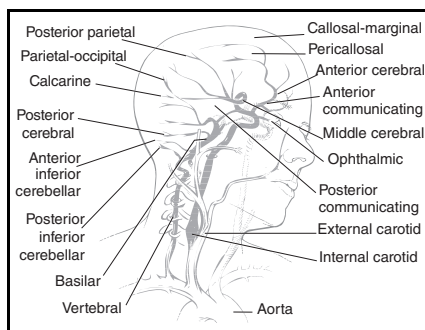
### General Symptoms

- Dizziness
- Dysphagia
- Headache
- Mental status changes
- Numbness of the face, arm, or leg
- Paralysis
- Seizure
- Syncope
- Vertigo

### Associated Conditions

- Cerebral hemorrhage
- Coma
- Hemiparesis

**Cerebrovascular Arteries**



- Hemiplegia
- Hypertension
- Obesity

### Related Conditions

- Alcohol and/or illegal drug abuse
- Bleeding disorders
- Diabetes
- Head injury
- Heart disease
- Hypercholesterolemia

### Differential Diagnoses

- Alzheimer's disease
- Brain abscess
- Subarachnoid hemorrhage

## Disease Progression

Medical treatment must be immediate since blockage of the arteries causes brain cell death. Once brain cell death occurs, the function of these cells is lost. In some cases, the remaining brain cells may be retrained to take over lost function. Statistics show that about 10 percent of stroke patients make a complete recovery while another 10 percent have severe complications.

## Complications and Sequelae

- Coma
- Death
- Deep vein thrombosis
- Depression
- Loss of speech
- Memory loss
- Paralysis
- Pulmonary embolism

## Diagnostic Procedures

- Angiogram
- CBC
- CT scan
- Echocardiogram
- Electrocardiogram
- MRI
- Prothrombin time
- Ultrasound

## Prognosis and Treatment

Outcome depends upon the size of the blockage, the severity of symptoms, and whether or not it is accompanied with cerebral infarction. The primary action is to save the patient's life and then focus on dissolving or removing the clot, which can be done with medication and/or surgical intervention.

## Associated Medications

- Aspirin
- Coumadin
- Heparin
- Tissue plasminogen activator (tPA)

## Terms

**syncope.** Light-headedness or fainting caused by insufficient blood supply to the brain.

**vertigo.** Sensation of movement, either of one's own body or the environment rotating or spinning, due to a disturbance of the inner ear, vestibular centers, or pathways in the central nervous system.

## Coding Tips

Use an additional code to identify status post administration of tPA (rtPA) in a different facility within the last 24 hours prior to admission to current facility (V45.88), if applicable.

Code assignment for a condition described as averted or aborted is dependent upon whether the condition actually occurred. The diagnosis of "aborted stroke" represents a distinct clinical situation. Therefore, patients who suffer a cerebral infarction and receive tPA are considered to have suffered an infarct, and should be reported with the appropriate cerebral infarction code.

Code 436 should never be used with a code from category 430-435.

Unspecified CVA and stroke should be reported with 434.91. For strokes and CVAs that are specified as hemorrhagic, embolic, or thrombotic, the specific codes should be assigned.

## AHA References

AHA: Q2, 1995, 14; Q3, 1997, 11; Q4, 1998, 87; Q4, 2004, 77-78; Q1, 2007, 23; Q3, 2007, 9