Western Australian Coding Rule

0215/02  Occlusion of internal carotid artery

Q. Is the internal carotid artery considered a cerebral or precerebral artery? e.g. When coding cerebral infarct due to occlusion of the internal carotid artery, the coder must choose cerebral or precerebral artery in the Index.

A. The internal carotid artery arises (originates) from the common carotid artery in the neck between the C3 and C5 level and supplies blood to the brain. The artery terminates in the brain by dividing into the anterior and middle cerebral arteries. The majority of the internal carotid artery is precerebral. The last portion is considered cerebral.

The following terms may be documented and may assist the coder in ascertaining the location of the occlusion or aneurysm.

- Origin – the origin of the internal carotid artery is in the neck, which is precerebral
- Proximal – proximal is closer to the point of origin (in the neck) and will likely be precerebral
- Terminal/termination – the internal carotid terminates within the brain, which is cerebral
- Supraclinoid/paraclinoid – the cerebral portion of the internal carotid is also referred to as supraclinoid or paraclinoid

The following pathways are affected:

Cerebral infarct due to internal carotid artery occlusion:
- Infarct, infarction - cerebral - due to - - occlusion NEC - - - cerebral arteries I63.5 Cerebral infarction due to U/S occlusion or stenosis of cerebral arteries - - - precerebral arteries I63.2 Cerebral infarction due to U/S occlusion or stenosis of precerebral arteries.

In the above pathway, the coder must know whether the occluded artery is cerebral or precerebral. Since the internal carotid artery can be either cerebral or precerebral, the coder should ascertain where the occlusion is and select the appropriate index entry.

Occlusion of internal carotid artery:
- Occlusion, occluded
- - artery
- - - carotid I65.2 Occlusion and stenosis of carotid artery
There is no index entry for ‘internal carotid’ when looking up occlusion of artery. Selecting ‘carotid’ results in a default code of I65.2 Occlusion and stenosis of carotid artery which is in a precerebral artery block. If the occlusion is documented as being in the cerebral portion of the internal carotid, this code is incorrect and I66.8 Occlusion and stenosis of other cerebral artery should be assigned instead.

**Aneurysm of internal carotid artery:**

Aneurysm
  - carotid I72.0 – see also Aneurysm, internal carotid
  
  →

Aneurysm
  - internal carotid NEC I72.0 Aneurysm and dissection of carotid artery
  - - intracerebral (paraclinoid) (supraclinoid) – see Aneurysm, brain

  →

Aneurysm
  - brain I67.1 Cerebral aneurysm, unruptured

Using the lead term ‘Aneurysm’, the first modifier selected should be ‘internal carotid’, however if carotid is selected instead there is a see also note that should be followed to the internal carotid entry. Once at this entry, the default code which is ‘not elsewhere classified, is to I72.0 Aneurysm and dissection of carotid artery. This code is in a precerebral block. There is also a subterm of ‘intracerebral’ which should be selected if the aneurysm is documented as being intracerebral. This leads the coder to the entry for aneurysm of brain.

**DECISION**

Coders should be aware that the internal carotid artery can be either cerebral or precerebral and look for documentation of the site of the condition. The Index should be followed carefully, based on the documentation. In most cases, the default will be precerebral, unless documentation indicates that the condition is in the cerebral portion of the artery.

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