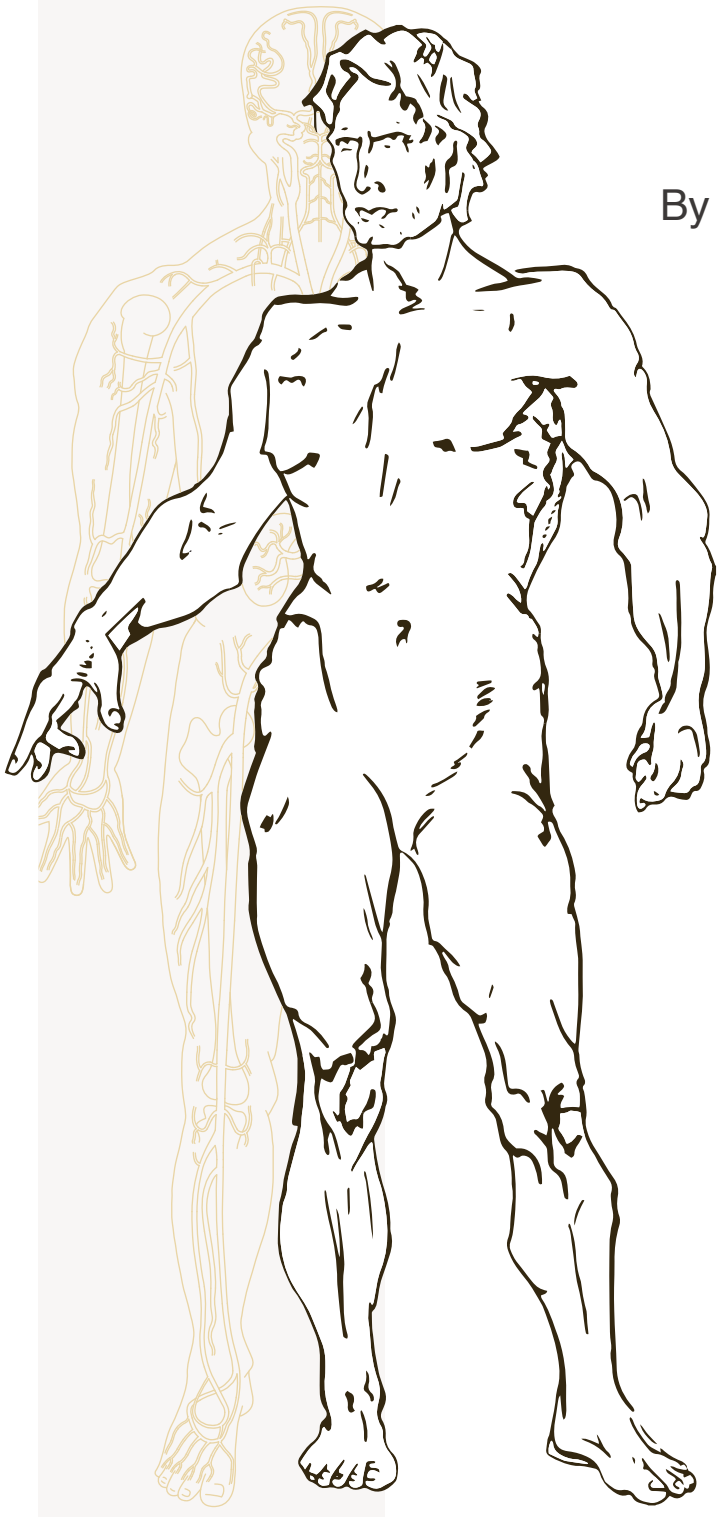
Dr. Z's Medical Coding Series

Vascular & Endovascular Surgery Coding Reference



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Celiac Artery Angiography

PROCEDURE:

The celiac artery is the first of the abdominal visceral arteries to arise anteriorly off the aorta. It arises at the T-12 level and supplies the stomach, proximal duodenum, distal esophagus, spleen, and liver. The celiac artery normally trifurcates into the left gastric, splenic, and common hepatic arteries. The left gastric artery courses superiorly, the splenic artery towards the left, and the common hepatic artery towards the right. The common hepatic artery divides into the proper hepatic artery (supplying the liver) and the gastroduodenal artery (GDA), which supplies the lower portion of the stomach, duodenum, and pancreatic head. The GDA gives rise to the pancreaticoduodenal arcade, which provides collateralization to the superior mesenteric artery (SMA). The GDA may be used as an arterial conduit for right coronary artery bypass grafting. The splenic artery supplies the spleen (via splenic artery branches) and pancreas (via the pancreatic magna and dorsal pancreatic branches). The left gastric artery supplies the proximal stomach, distal esophagus, and occasionally the left lobe of the liver. The inferior phrenic artery can arise from the left gastric artery. There are numerous ways that blood can be re-routed to the visceral organs when one channel is interrupted. This allows embolization procedures to be performed safely and allows collateral flow in patients with arterial occlusive disease. Congenital variations are very common in the visceral vasculature, so close attention to physician documentation is necessary when coding these exams. There are at least thirteen variations of hepatic arterial anatomy.

CLINICAL INDICATIONS:

The celiac artery is often evaluated in cases of GI bleeding (gastric or duodenal ulcer, Mallory-Weiss tear of the distal esophagus), abdominal trauma, pancreatitis, hepatic or pancreatic neoplasm, thromboembolism, and portal hypertension.

THE CODE FOR CATHETER SELECTIVITY FOR NORMAL ANATOMY IS AS FOLLOWS:

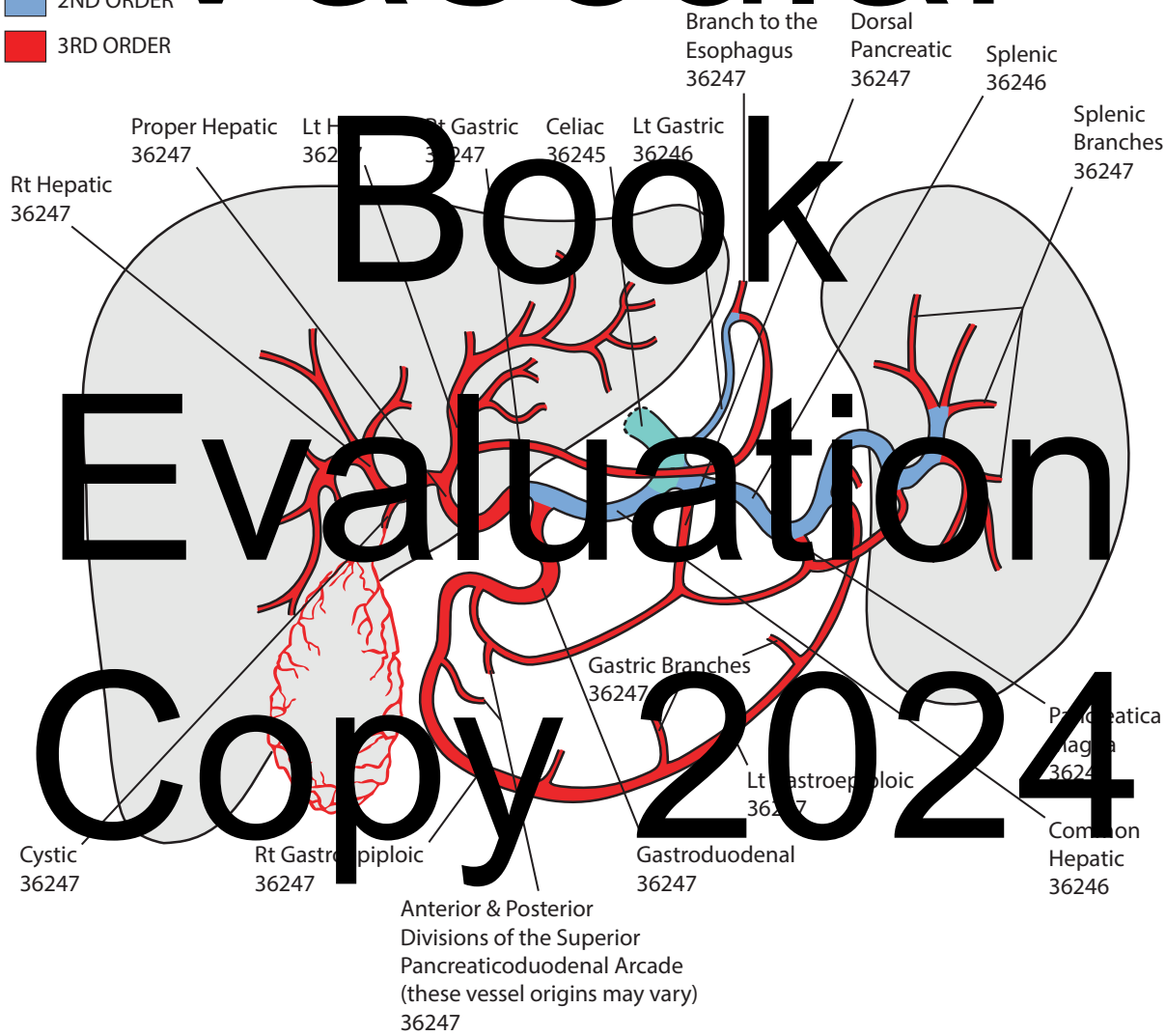
ARTERY	CODE	APC	WORK RVU	ARTERY	CODE	APC	WORK RVU
Celiac	36245	N/A	4.65	Proper hepatic	36247	N/A	6.04
Left gastric	36246	N/A	5.02	Right hepatic	36247	N/A	6.04
Splenic	36246	N/A	5.02	Left hepatic	36247	N/A	6.04
Pancreatica magna	36247	N/A	6.04	Right gastric	36247	N/A	6.04
Dorsal pancreatic	36247	N/A	6.04	Right gastroepiploic	36247	N/A	6.04
Common hepatic	36246	N/A	5.02	Gastroduodenal	36247	N/A	6.04

If the vessels selected arise from the same vascular trunk, only the highest order selective catheterization is reported, and code 36248 is reported for the selective catheterization of the other branches.

CODES:

PROCEDURE DESCRIPTION	PROC CODE	APC	WORK RVU	S&I CODE	APC	WORK RVU
Celiac angiogram (selective) with or without aortogram	36245	N/A	4.65	75726	5184	2.05
Any selective branch as the initial exam	36246, 36247	N/A N/A	5.02 6.04	75726	5184	2.05
Any selective branch if additional imaging is done after the basic celiac exam	36246, 36247, or ☆36248	N/A N/A N/A	5.02 6.04 1.01	☆75774	N/A	1.01

☆ Add-on Cod



CELIAC ARTERY - DETAILED ANATOMY

CODING INSTRUCTIONS:

1. Celiac artery angiography is often performed at the same time as evaluations of the superior mesenteric and inferior mesenteric arteries.

2. Report code 75774 if additional selective catheter placement and imaging is performed after a basic celiac angiogram has been performed.

3. Always consider the many anatomic variations that exist when coding the visceral vasculature.

4. Hepatic branches are named for segments of the liver as seen on a CT scan. They are labeled segments 1-8, with subsegments labeled "a" or "b". These are commonly described during TACE (chemoembolization) and TARE (radioembolization with Y-90) procedures. All branches selected are selective catheter placements described by code 36247 for the first selection and by code 36248 for each additional selective catheter placement (cocumentation).

5. A replaced right hepatic artery arising as a second order selective vessel off the SMA, a direct origin of the left gastric artery off the aorta, a left hepatic artery arising off the left gastric artery, and a common or single trunk off the aorta supplying the celiac and superior mesenteric arteries are all common anatomical variants of the visceral arteries.

6. Do not code the non-selective aortogram (75625) when performed in conjunction with a selective visceral angiogram (75726).

7. Do not report the non-selective catheter placement code 36200 when a selective catheter placement has been performed (36245, 36246, or 36247) via the same access site.

8. Do not report code 75726 unless the catheter has been selectively placed in the celiac artery or one of its branches. Code 75726 is a selective imaging code.

9. If the GDA is selected and imaged to evaluate for use as an arterial conduit for coronary artery bypass surgery (or to evaluate an existing bypass graft) during a cardiac catheterization, report the appropriate cardiac catheterization code 93455, 93457, 93459, 93461, or 93564.

10. Code 75726 has an MUE of three.

EXAMPLE(S)

1) 65-year-old male with liver metastasis for possible embolization. Diagnostic angiography is performed to determine if the patient is a candidate for embolization. Via right transfemoral approach, the celiac artery is selected and imaged (75726), demonstrating normal anatomy without stenoses. The splenic artery is selected and imaged for the purpose of portal venous perfusion evaluation. This shows normal splenic arterial anatomy and a widely patent splenic and portal vein (36248, 75887). The left gastric artery is selected and imaged, showing no collateral flow to the left lobe of the liver (36248, 75774). The gastroduodenal artery is selected and imaged with normal findings (36247, 75774). This vessel can be coil embolized prior to hepatic chemo-infusion or chemo-embolization. The right hepatic (36248, 75774) and left hepatic (36248, 75774) arteries are also selected and imaged, showing normal flow dynamics and anatomy as well as a tumor in the right lobe. The cystic artery to the gallbladder is present and must be avoided during embolization.

Note: The celiac selective catheter placement code is included in the more selective catheter placements in the left and right hepatic arteries. To code for S&I codes, images must be obtained with purpose (medical necessity) and must be described and documented in the permanent medical record.

2) Patient with upper gastrointestinal bleeding after vomiting. Via a transfemoral approach, the celiac artery is selected and imaged (75726). The gastroduodenal artery is selected and imaged (36247, 75774). No bleeding is seen in the duodenum. The left gastric is not seen off the celiac. Aortogram is performed (no code), showing the left gastric arising as a separate vessel off the aorta. This is selected and imaged (36245-59, 75726-59), showing a hypervascular region with active bleeding at the gastroesophageal junction due to a Mallory-Weiss tear. This is embolized with gelfoam (37244). Follow-up angiography (bundled) shows cessation of bleeding.

3) Patient with bleeding duodenal ulcer at endoscopy. Via a transfemoral route, a catheter is placed in the celiac artery (36245) and SMA (36245-59) with imaging performed (75726, 75726-59). Active bleeding is seen in the region of the duodenum. A microcatheter is advanced to the anterior and posterior superior pancreatico-duodenal arteries of the celiac artery (add 36247, 36248; delete 36245), and embolization with microcoils is performed (37244). Next, the anterior and posterior divisions of the inferior pancreatico-duodenal arteries arising off the SMA are selected and embolized [add 36247-59 and 36248 (embolization is included, as one surgical site), delete 36245-59]. Follow-up angiography from all four vessels shows resolution of bleeding (bundled).

REFERENCES:

Clinical Examples in Radiology, Summer 08:1-3, Fall 13:2-3&5, Summer 15:2, Summer 17:11, Summer 18:2, Winter 18:11, Spring 19:2, Fall 21:16, Winter 23:8

CPT Assistant, Fall 93:11, Aug 96:1, Sep 98:3, Oct 00:4, Jan 01:14, Sep 22:17

CPT Changes: An Insider's View 2014

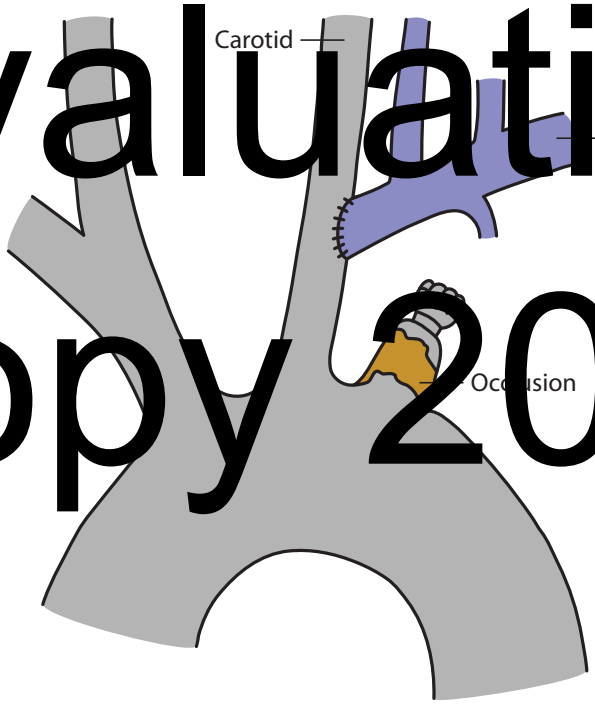
SIR *Interventional Radiology Coding User's Guide* 2009, pages 45-52, 194

SIR, IR Quarterly, Fall 18:33

Arterial Transposition

PROCEDURE:

These procedures are most commonly performed for reconstruction of the supra-aortic trunks, and the vertebrobasilar system, which carry blood to the head and upper extremities. Stenosis of one of these vessels may result in symptoms in the hemispheric (carotid) distribution, vertebrobasilar ischemia (e.g., alternating hemiparesis, drop attacks, loss of vision, etc.), or upper extremity ischemia. The symptoms may be from obstruction of flow, plaque embolization, or both. Benefits of transpositions include only one anastomosis versus two with a typical bypass procedure, excellent long-term patency rates, avoidance of prosthetic grafts, and exclusion of the diseased segment. The approach is usually via supraclavicular incision or an anterior neck incision for distal vertebral artery transposition to the distal carotid artery. The vessel is exposed and mobilized to ensure enough length, without tension or kinking, to reach the transposition vessel, which is also isolated. An appropriate sized arteriotomy is made in the transposition site, and an end-to-side anastomosis is created after application of clamps. Clamping of the carotid artery, if the contralateral carotid is occluded, increases risks of brain ischemia and may prompt transposition to the subclavian artery instead. New endovascular treatments of thoracic aneurysms may involve coverage of the left subclavian artery origin, which may be addressed by an open subclavian to carotid transposition or with thoracic branched endograft (TBE). Lastly reimplantation of visceral vessels to an infrarenal aortic prosthetic graft is performed to maintain flow to their original vascular distributions and to treat ischemia. This is accomplished with the Carrel patch technique where the vessel origin is dissected and a button of surrounding aortic tissue is also cut. A side biting clamp is applied to the prosthesis, an aortotomy matching the size of the button is made, and the vessel is attached with an end-to-side anastomosis.



SUBCLAVIAN TO CAROTID TRANSPOSITION

CLINICAL INDICATIONS:

Symptomatic vertebral artery stenosis/occlusion treated with vertebral to carotid or subclavian transposition. Symptomatic common carotid stenosis/occlusion at the origin with the normal distal carotid artery treated with common carotid to subclavian transposition. Symptomatic proximal subclavian artery stenosis/occlusion treated with prevertebral subclavian artery to common carotid artery transposition. Other indications include coverage of the left subclavian artery origin with an endograft and reimplantation of visceral vessels to an infrarenal aortic prosthesis for maintenance of flow to viscera or to alleviate ischemia.

CODES:

PROCEDURE DESCRIPTION	CPT CODE	ASSISTANT AT SURGERY	GLOBAL SURGERY	SURGEONS	ASC	WORK RVU
Open subclavian to carotid artery transposition performed in conjunction with endovascular repair of descending thoracic aorta, by neck incision, unilateral	♦33889	Allowed	00	Paid	N/A	15.92
Transposition and/or reimplantation; vertebral to carotid artery	♦35691	Allowed	90 days	Paid with Documentation	N/A	18.41
Transposition and/or reimplantation; vertebral to subclavian artery	♦35693	Allowed	90 days	Paid with Documentation	N/A	15.73
Transposition and/or reimplantation; subclavian to carotid artery	♦35694	Allowed	90 days	Paid with Documentation	N/A	19.28
Transposition and/or reimplantation; carotid to subclavian artery	♦35695	Allowed	90 days	Paid with Documentation	N/A	20.06
Reimplantation, visceral artery to infrarenal aortic prosthesis, each artery (List separately in addition to code for primary procedure)	☆♦35697	Allowed	ZZZ	Paid	N/A	3.00

☆Add-on Code
♦ Inpatient-Only Procedure
ZZZ = The code is related to another service and is always included in the global period of the other service.

CODING INSTRUCTIONS:

1. Report code 33889 for subclavian to carotid artery transposition during endovascular repair of descending thoracic aneurysm.

2. Do not report code 35694 for subclavian to carotid artery transposition during endovascular repair of descending thoracic aneurysm. Report code 33889 instead. Do not report codes 33889 and 35694 together.

3. Report code 35691 for vertebral to carotid artery transposition.

4. Report code 35693 vertebral to subclavian artery transposition.

5. Report code 35694 for subclavian to carotid artery transposition.

6. Report code 35695 for carotid to subclavian artery transposition.

7. Add-on code 35697 is only reported for implantation of vessels into an infrarenal aortic prosthetic graft.

8. Do not report code 35697 with 33877 (repair of thoracoabdominal aortic aneurysm with graft), as it is included.

9. Repairs for congenital transposition of the great vessels are in the code range 33770-33781.

10. Do not code for complete angiography.

11. Procedures for establishing localized inflow and outflow are included.

EXAMPLE(S):

1) A patient with a descending thoracic aortic aneurysm presents for endovascular repair. A right femoral cutdown (34812) is performed with aortic access achieved (36200). The endograft is deployed, excluding the aneurysm, which is immediately adjacent to the origin of the left subclavian artery. This requires the endograft to cover the subclavian origin to obtain a good seal (33880, 75956). A supraclavicular incision is made, and the common carotid and proximal left subclavian arteries are exposed and controlled. The proximal left subclavian artery is transected, and the remaining stump doubly ligated after heparinization. The subclavian is mobilized and is able to reach the common carotid without undue tension. The common carotid is clamped, an arteriotomy is made, and an end-to-side anastomosis is performed. The clamps are released, reestablishing flow to the left upper extremity (33889).

Note: The same transposition during an open (not endovascular) repair is reported with code 35694.

2) An elective repair of a 6 cm infrarenal abdominal aortic aneurysm is performed with a prosthetic tube graft (35081). Upon entering the aneurysm, the inferior mesenteric artery (IMA) is noted to have sparse backbleeding. Upon release of the aortic clamps, the descending and sigmoid colon do not reperfuse as expected, with a resulting "dusky" appearance. A sterile intraoperative Doppler reveals decreased pulsations of the bowel. It is decided to reattach the IMA to prevent colonic ischemia. A button of aortic tissue is cut around the origin of the IMA, the prosthetic graft is again clamped, and a punch is used to create an aortic graft otomy matching the IMA cuff. This is sewn in place, and, after release of all clamps, the colonic appearance improves dramatically (35697).

3) A 75-year-old female presents with vertebrobasilar symptoms. A work-up includes an angiogram, which reveals occlusion of the proximal left vertebral artery and a normal left common carotid artery at its origin from the aorta, as well as the remainder of the carotid artery. At surgery, a supraclavicular incision is made, and the proximal vertebral artery is exposed between the sternocleidomastoid muscle bellies. The sympathetic ganglion is carefully preserved. Heparinization is performed, and the vertebral artery is mobilized and then transected with double ligation of the remaining proximal stump. The common carotid artery transposition site is exposed and clamped. A punch arteriotomy is made in the common carotid artery, and the vertebral artery is transposed to the carotid artery for creation of an end-to-side anastomosis. The clamps are released, and a

drain is left exiting the incision (35691).

REFERENCES:

CPT Assistant, Jul 06:7

CPT Changes: An Insider's View 2004, 2006

33225	34808	35683	36907	37247	93573
33277	34812	35685	36908	37249	93574
33866	34813	35686	36909	37252	93575
33884	34820	35697	37185	37253	93584
33904	34833	35700	37186	49435	93585
33987	34834	36218	37222	61641	93586
34709	353[illegible]	[illegible]27	372[illegible]23	61[illegible]42	[illegible]3587
34711	352[illegible]	[illegible]38	37232	6[illegible]51	93588
34713	35466	36248	37233	75774	99153
34714	35500	36474	37234	76937	99157
34715	35572	36476	37235	77001	0076T
34716	35681	364[illegible]	[illegible]37	92998	G0278
34717	35682	36[illegible]83	3723[illegible]	93569	

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Vascular & Endovascular Surgery Coding Reference

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