Laparoscopic versus open celiac ganglionectomy in patients with median arcuate ligament syndrome

Median arcuate ligament (MAL) syndrome, which is also referred to as celiac artery compression syndrome, may be approached using either open or laparoscopic methods. This therapy is often coupled to celiac artery reconstruction and/or celiac ganglionectomy. The celiac plexus is a sympathetic bundle at the level of the first lumbar vertebra. Interruption of these nerves is inherent to division of the MAL and therefore is not separately reportable using CPT code 64818 (Sympathectomy, lumbar). There is no specific CPT code for release of the median arcuate ligament.

When exploration is performed with division of the diaphragmatic crura and the associated compressive ligament, the surgeon may elect to use standard exploratory coding or defer to the unlisted procedure category. Open exploration of the abdomen through a midline or subcostal incision is described by CPT code 49000 (Exploratory laparotomy, exploratory celiotomy with or without biopsy(s) (separate procedure)) while open retroperitoneal exposure requires CPT code 49010 (Exploration, retroperitoneal area with or without biopsy(s) (separate procedure)). Alternatively, a less-invasive laparoscopic exploration of the abdomen is contained within CPT code 49320 (Laparoscopy, abdomen, peritoneum, and omentum, diagnostic, with or without collection of specimen(s) by brushing or washing (separate procedure)). CPT codes 49329 (Unlisted laparoscopy procedure, abdomen, peritoneum and omentum) and 49999 (Unlisted procedure, abdomen, peritoneum and omentum) are alternative reporting schemes. As always, unlisted coding will require submission of medical records and be subject to review by a medical director. The delay and uncertainty of such payment must be weighed against the lower but more secure relative value unit (RVU) content of the generalized explorations listed above.

At the time of surgery, the celiac artery may require operative intervention. In that setting, the above listed CPT codes are not appropriate for submission to the insurance carrier. The work contained within those explorations is inherent to the more extensive arterial repair code descriptions. Celiac artery stenosis may result in aneurysmal degeneration of the visceral vessel. CPT code 35121 (Direct repair of aneurysm, pseudoaneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for aneurysms, pseudoaneurysms, and associated occlusive disease, hepatic, celiac, renal, or mesenteric artery) would describe an arterial revascularization for this circumstance. If the artery is simply stenotic, CPT code 35281 (Repair blood vessel with graft other than vein; intra-abdominal) illustrates prosthetic patch angioplasty while CPT code 35251 (Repair blood vessel with vein graft; intra-abdominal) depicts an autogenous repair. Open surgical bypass of the diseased segment for occlusive disease follows standard bypass coding methodology with respect to inflow, outflow, and conduit. Anatomic bypasses include aorto-ceeliac with vein (CPT code 35531) and aorto-ceeliac with “other than vein” (CPT code 35631).

Endovascular treatment of a persistent stenosis after decompression is reported using component coding guidelines as previously published. All CPT codes listed above have an associated 90-day global period except CPT code 49320 which is only 10 days.

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