

Coders' Desk Reference for ICD-10-PCS Procedures

Clinical descriptions with answers to your
toughest ICD-10-PCS coding questions

2020



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Contents

Introduction	1
ICD-10-PCS Official Guidelines for Coding and Reporting 2019.....	5
ICD-10-PCS Root Operation Definitions	11
Abbreviations, Acronyms and Symbols	14
Procedural Eponyms.....	28
Surgical Terms	38
Medical and Surgical Section	45
3f (Aortic) bioprosthesis valve	47
Abdominal muscle component release	48
Abdominoplasty.....	49
Ablation of peripulmonary veins	50
Adjustment of pacemaker lead	51
Alveoloplasty	52
Alveotomy.....	53
Amplatzer® vascular plug	54
Amputation	55
Anal fistulectomy	56
Anal fistulotomy.....	57
Aneurysmectomy with replacement	58
Aorto-bifemoral bypass graft.....	59
Arterial switch procedure	60
Arterioplasty (bovine patch)	61
Arteriovenous (AV) fistula	62
Bile duct incision for relief of obstruction.....	63
Biopsy of periurethral tissue	64
Blalock-Taussig shunt procedure.....	65
Blepharoplasty.....	66
Bone marrow biopsy	67
Browpexy	68
Bunionectomy	69
CABG	70
Cardiac ablation	71
Carotid endarterectomy.....	72
Cholecystectomy.....	73
Chondroplasty	74
Chordotomy.....	75
Closed reduction and percutaneous pinning	76
Closure of left atrial appendage.....	77
Cochlear implant.....	78
Colectomy	79
Colostomy.....	80
Colporrhaphy	81
Common bile duct exploration	82
Control of bleeding ulcer	83
Control of epistaxis.....	84
Control postoperative bleeding	85
Conversion gastrostomy to jejunostomy (feeding device)	86
Coracoacromial ligament release	87
Correction of syndactyly	88
Cranial vault reconstruction	89
Craniotomy with clipping of cerebral aneurysm	90

Illustrations

Medical and Surgical

Angioplasty, Percutaneous Transluminal Coronary (PTCA)	95
Bunionectomy	105
Bypass Graft, Coronary Artery (CABG)	107
Circumcision	113
Closure, Left Atrial Appendage	114
Dilation and Curettage (D&C)	130
Drainage, Floor of Mouth	134
Fusion, Ankle (Arthrodesis)	152
Fusion, Anterior Lumbar Interbody (ALIF) (Anterior Lumbar Vertebral Arthrodesis)	153
Gastrectomy, Vertical Sleeve (VSG)	158
Gastrojejunostomy, Roux-en-Y (Gastric Bypass for Morbid Obesity)	159
Implantation, Biventricular Heart Replacement System (Artificial Heart)	172
Insertion, Cardiac Defibrillator Generator (ICD)	177
Insertion, Spinal Stabilization Device	189
Insertion, Ventricular Assist Device	193
Intubation, Endotracheal	194
Joint Replacement, Hip (Total)	197
Joint Replacement, Knee	201
Laminectomy, Decompressive (Hemilaminectomy)	207
Lithotripsy, Extracorporeal Shock Wave (ESWL)	213
Mastectomy	222
Release, Carpal Tunnel	249
Repair, Aneurysm, Abdominal Aorta, Endovascular with Stent Graft (EVAR)	255
Replacement, Pacemaker Generator (End of Life)	265
Spinal Tap (Lumbar Puncture)	278
Switch, Duodenal (Biliopancreatic Diversion)	282
Thyroidectomy	287
Tonsillectomy with Adenoidectomy	290
Tracheostomy	292
Turbinelectomy, Submucous Resection	297
Vertebroplasty	307
Z-plasty, Skin (Scar Revision)	310

Medical and Surgical Related

Amniocentesis	313
Delivery, Vaginal, Breech	317

Ancillary

Therapy Treatment, Laser Interstitial (LITT) (Brain)	369
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Introduction

Coding is a complicated business. It is not enough to have a current copy of an ICD-10-PCS book—coders must have a firm enough grasp of medical terminology, anatomy, and surgical techniques to be able to translate procedure descriptions in medical records into detailed codes. ICD-10-PCS guidelines state that the physician is not responsible for changing the common procedure terminology he or she uses to document procedures so that it better matches terminology used in the coding system. Rather, the burden is on the coder, who must interpret physicians' procedure descriptions and reflect them in the appropriate ICD-10-PCS codes. The *Coders' Desk Reference for Procedures (ICD-10-PCS)* addresses this challenge.

This book provides coders, coding managers, medical staff and health care professionals, payers, educators, and students with comprehensive, clear descriptions of procedures. The goal is to enrich users' clinical understanding of surgical procedures and how they relate to the way ICD-10-PCS classifies procedures. The result is improved coding confidence so that code selection becomes more accurate and efficient. The coding guidance in *Coders' Desk Reference for Procedures (ICD-10-PCS)* is based on the official version of the ICD-10 Procedure Coding System (ICD-10-PCS), effective October 1, 2016. (Please note that this procedure coding reference is intended to be used with an official ICD-10-PCS code book.)

This desk reference is organized by common procedure nomenclature used in the hospital setting, which is linked to the related root operation tables. The procedures are described in layman's terms, translated to ICD-10-PCS root operation terminology, and the corresponding root operation tables are identified.

Detailed descriptions using terminology coders see in medical documents, together with coding clarification and guidance and important instruction regarding ICD-10-PCS conventions, make *Coders' Desk Reference for Procedures (ICD-10-PCS)* an unparalleled guidebook to code selection.

Important Message: Not all categories, subcategories, or procedures have been represented in this first edition of the *Coders' Desk Reference for Procedures (ICD-10-PCS)*. Additional procedures not part of the 2017 edition will gradually be incorporated into future editions.

ICD-10-PCS Overview

ICD-10-PCS Code Structure

ICD-10-PCS has a multi-axial, seven-character, alphanumeric code structure. Each character contains

up to 34 possible values. Each value represents a specific option for the general character definition. The 10 digits 0–9 and the 24 letters A–H, J–N, and P–Z may be used for each character. The letters O and I are not used so as to avoid confusion with the digits 0 and 1.

An ICD-10-PCS code is the result of a process rather than a single fixed set of digits or alphabetic characters. The process consists of combining semi-independent values from among a selection of values, according to the rules governing the construction of codes. A code is derived by choosing a specific value for each of the seven characters. Based on details about the procedure performed, values are assigned for each character specifying the section, body system, root operation, body part, approach, device, and qualifier. Because the definition of each character is also a function of its physical position in the code, the same letter or number placed in a different position in the code has a different meaning.

The seven characters that make up a complete code have specific meanings that vary for each of the 17 sections of the manual. Procedures are divided into sections that identify the general type of procedure (e.g., Medical and Surgical, Obstetrics, Imaging). The first character of the procedure code always specifies the section. The second through seventh characters have the same meaning within each section but may mean different things in other sections. In all sections, the third character specifies the general type, or root operation, of procedure performed (e.g., Resection, Transfusion, Fluoroscopy), while the other characters give additional information such as the body part and approach.

ICD-10-PCS Index

Codes may be found in the index based on the general type of procedure (e.g., Resection, Transfusion, Fluoroscopy), or a more commonly used term (e.g., appendectomy). For example, the code for percutaneous intraluminal dilation of the coronary arteries with an intraluminal device can be found in the ICD-10-PCS index under "Dilation" or a synonym for dilation (e.g., "Angioplasty"). The index then specifies the first three or four values of the code or directs the user to see another term.

The user can use the alphabetic index to locate the appropriate table containing all the information necessary to construct a procedure code. The PCS tables should always be consulted to find the most appropriate valid code. Coders may choose a valid code directly from the tables; they do not have to consult the index before proceeding to the tables to complete the code.

Coders' Desk Reference for Procedures (ICD-10-PCS)

Main Terms

The alphabetic index reflects the structure of the tables. The index:

- Is based on the value of the third character
- Contains common procedure terms
- Lists anatomic sites
- Uses device terms

The main terms in the alphabetic index are root operations, root procedure types, or common procedure names. The index provides at least the first three or four values of the code, and some entries may provide complete valid codes. However, the user should always consult the appropriate table to verify that the most appropriate valid code has been selected.

For the Medical and Surgical and related sections, the root operation values are used as main terms in the index. The subterms under the root operation main terms are body parts. For the Ancillary section of the code tables, the main terms in the index are the general type of procedure performed.

The second type of term in the index uses common procedure names, such as "appendectomy" or "fundoplication." These common terms are listed as main terms with a "see" reference noting the PCS root operations that are possible valid code tables based on the objective of the procedure.

Use Reference

The index also lists anatomic sites from the Body Part Key and device terms from the Device Key. These terms are listed with "use" references, which are additional references to the terms located in the appendix keys. The term provided is the body part value or device value to be selected when constructing a procedure code using the code tables. This type of index reference does not direct the user to another term in the index, but provides guidance regarding character value selection. Therefore, "use" references generally do not refer to specific valid code tables.

ICD-10-PCS Code Tables

ICD-10-PCS contains 17 sections of code tables organized by general type of procedure. Each table is composed of rows that specify the valid combinations of code values. In most sections of the coding system, the upper portion of each table contains a description of the first three characters of the procedure code. In the Medical and Surgical section, for example, the first three characters contain the name of the section, the body system, and the root operation performed. The four columns in the table specify the last four characters. In the Medical and Surgical section, they are labeled body part, approach, device and qualifier, respectively. Each row in the table specifies the valid combination of values for characters 4 through 7. All seven characters must be specified to form a valid code.

Note that the code must be constructed with a combination of values within the same row of the table. A combination of values from different rows of the same table will result in an invalid code.

Format

Coders' Desk Reference for Procedures (ICD-10-PCS) is divided into convenient sections for easy use. The basic format of the book provides clinical coding support with illustrations, narratives, and other resources that help the user work from the medical record. The book begins with special chapters that provide detailed information on coding guidelines and conventions relating to ICD-10-PCS procedure coding, as well as common abbreviations, acronyms, and symbols, eponyms, and surgical terms found in the medical record. It then follows the organization of ICD-10-PCS, looking at procedures and their associated ICD-10-PCS root operation tables. Due to the significant expansion of the number of ICD-10-PCS codes, it is impossible to include a description of every procedure. Included are representative examples of procedures, organized by section and subsection.

List of Illustrations

This is a list of illustrations by procedure name with a cross-reference to the appropriate page.

ICD-10-PCS Official Guidelines for Coding and Reporting 2017

For the new coder, and even for the veteran, this chapter provides an overview and detailed instructions on ICD-10-PCS coding guidelines and conventions.

ICD-10-PCS Root Operation Definitions

This resource is a compilation of all root operations in the Medical and Surgical-Related sections of the ICD-10-PCS manual. It provides a definition and in some cases a more detailed explanation of the root operation to better reflect its purpose or objective. Examples of related procedures may also be provided.

Abbreviations, Acronyms, and Symbols

The medical profession has its own shorthand for documentation. Here, acronyms, abbreviations, and symbols commonly seen on operative reports or medical charts are listed for easy reference.

Procedure Eponyms

In the medical record, procedures are often documented by their common name or eponym (such as Billroth's operation I). Eponyms honor the developer of a procedure or test but do little to clarify what the procedure is. ICD-10-PCS does not cross-reference eponyms even though they are commonly noted in medical documentation. Our editors have researched the procedure eponyms in the volume 3 index of the ICD-9 book and identified the associated ICD-10-PCS

three- and sometimes four-character tables. The three-character description references the root operation and body system; the four-character description specifies the root operation and body part, when applicable.

Surgical Terms

Operative reports contain words and phrases that not only communicate the importance and urgency of surgery, but also describe the techniques. The *Coders' Desk Reference for Procedures (ICD-10-PCS)* glossary of surgical terms includes the terms operative reports most commonly use to describe techniques and tools.

Procedures

The first section of the desk reference, Medical and Surgical, contains the majority of procedures typically reported in an inpatient setting.

The next section is Medical and Surgical-Related sections, with subsections as listed below:

- Obstetrics
- Placement
- Administration
- Measurement and Monitoring
- Extracorporeal Assistance and Performance
- Extracorporeal Therapies
- Osteopathic
- Other Procedures
- Chiropractic

Next is the Ancillary section, which contains subsections for Imaging, Nuclear Medicine, and Radiation Therapy. Codes in these sections contain character values for contrast, modality qualifier, and equipment.

Last is the New Technology section, which contains codes identifying procedures requested via the new technology application process, and codes that capture new technologies not currently classified in ICD-10-PCS.

This section may include medical and surgical procedures, medical and surgical-related procedures,

or ancillary procedures that are currently designated as new technology.

Alphabetic Index

The "Alphabetic Index" enables the user to look up a procedure by principal procedure or keyword, such as "Bypass," followed by descriptive terms, such as "Extracranial-Intracranial." "See also" notes are cross-referenced terms within the desk reference that provide additional information.

How to Use Coders' Desk Reference for Procedures (ICD-10-PCS)

The *Coders' Desk Reference for Procedures (ICD-10-PCS)* organizes the procedures first by section (Medical Surgical, Medical Surgical-Related, Ancillary, etc.), then by subsection, and then alphabetically by procedure name, using common procedure nomenclature. Use the "Alphabetic Index" to look up a procedure by the term, procedure, or keyword. Use "see also" references to identify descriptions of other procedures that may provide additional information.

Each procedure is linked to the related root operation table or tables, including the pertinent body system and root operations. Depending on the procedure, there may also be references to body part, approach, device, and qualifier. Except for the root operation table references, this book provides no character values or complete codes. The ICD-10-PCS code book tables should always be consulted to find the complete, most appropriate valid code.

Following is a brief explanation of the elements on a sample page. Each procedure is different, and not all elements are included in every procedure. The structure may differ slightly in the Medical and Surgical-Related and Ancillary sections from the Medical and Surgical section. For example in some sections, instead of Approach, the value will be specified as Duration, or instead of Device, the value will be Substance.

Procedure Eponyms

Eponym	Description	ICD-10-PCS Table Reference
Abbe	Vaginal construction — creation of vaginal canal (vaginoplasty) without graft or prosthesis	0UQG Repair Vagina
Abbe	Vaginal construction — creation of vaginal canal (vaginoplasty) with graft or prosthesis	0UUG Supplement Vagina
AbioCor®	Implantation of total internal biventricular heart replacement system	02RK Replacement Ventricle, Right 02RL Replacement Ventricle, Left
Aburel	Intra-amniotic injection of abortifacient for abortion	10A Abortion Pregnancy
Adams	Excision of palmar fascia for release of Dupuytren's contracture	0JB Excision Subcutaneous Tissue and Fascia
Adams	Advancement of round ligament(s) of uterus	0US9 Reposition Uterus
Adams	Crushing of nasal septum	09SM Reposition Nasal Septum
AESOP®	Robotic assisted procedures — Automated Endoscopic System for Optimal Positioning	8E0 Other Procedures Physiological Systems and Anatomical Regions
Albee	Bone peg, femoral neck Graft for slipping patella Sliding inlay graft, tibia	0QU Supplement Lower Bones
Albert	Arthrodesis, knee	0SG Fusion Lower Joints
Aldridge (-Studdiford)	Urethral sling	0TSD Reposition Urethra
Alexander	Shortening of round ligaments of uterus	0US9 Reposition Uterus
Alexander-Adams	Shortening of round ligaments of uterus	0US9 Reposition Uterus
Almoor	Extrapetrosal drainage	099 Drainage Ear, Nose, Sinus
Altemeier	Perineal rectal pull-through operation	0DTP Resection Rectum
Ammon	Dacryocystotomy incision (for drainage) of a lacrimal sac	089 Drainage Eye
Anderson	Tibial lengthening	0QB Division Lower Bones 0QR Replacement Lower Bones 0QU Supplement Lower Bones
Anderson-Hynes	Pyeloplasty	0TQ Repair Urinary System 0TS Reposition Urinary System
Anel	Dilation of lacrimal duct	087X Dilation Lacrimal Duct, Right 087Y Dilation Lacrimal Duct, Left
Arslan	Fenestration of inner ear	09QD Repair Inner Ear, Right 09QE Repair Inner Ear, Left
Asai	Laryngoplasty	0CQS Repair Larynx 0CRS Replacement Larynx 0CUS Supplement Larynx
Baffles	Interatrial transposition of venous return	02U5 Supplement Atrial Septum
Baffle	Atrial/interatrial/intra-atrial transposition of venous return	02U5 Supplement Atrial Septum
Baldy-Webster	Uterine suspension	0US9 Reposition Uterus

Angioplasty, Percutaneous Transluminal Coronary (PTCA)

Body System

Heart and Great Vessels

PCS Root Operation

Dilation

Root Operation Table

Ø27 Dilation, Heart and Great Vessels

Body Parts

Coronary Artery, One Artery

Coronary Artery, Two Arteries

Coronary Artery, Three Arteries

Coronary Artery, Four or More Arteries

Approach

Percutaneous

Device

No Device

Qualifiers

Bifurcation

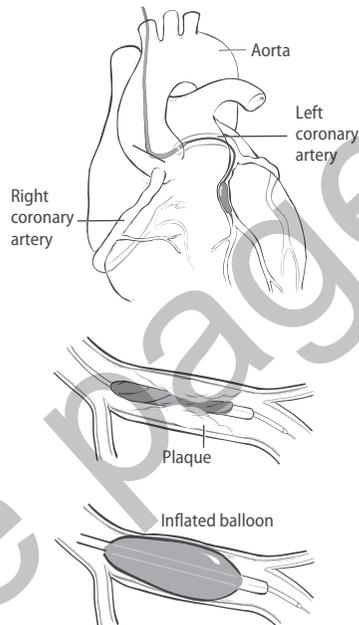
No Qualifier

Description

Percutaneous transluminal coronary angioplasty (PTCA), also known as balloon angioplasty, coronary angioplasty, or percutaneous coronary angioplasty, is a minimally invasive procedure using a balloon to expand blocked or narrowed coronary arteries.

Coronary artery disease is the narrowing or blockage of the coronary arteries caused by atherosclerosis, which is the buildup of plaque consisting of cholesterol, fatty deposits, calcium, and fibrin on the inner walls of the coronary arteries. This plaque may partially or totally block the blood flow through the coronary artery. This decreased blood flow starves the heart of the oxygen and nutrients it needs to function properly. If the oxygen supply to the heart muscle is reduced, a heart attack may occur.

In the PTCA procedure, the physician makes a small incision in the arm or leg and places two catheters. A catheter is inserted through the femoral, radial, or brachial artery and a second catheter with a balloon tip is threaded up to the heart. The physician inflates the balloon at the tip of the second catheter to flatten plaque obstructing the artery against the walls of the artery. If sufficient results are not obtained after the first inflation, the physician may reinflate the balloon for a longer period of time or at greater pressure. The catheter is removed, and pressure is placed over the incision for 20 to 30 minutes to stem bleeding. The patient is observed for a period afterward.



PTCA is reported with the root operation Dilation, which describes expanding an orifice or the lumen of a tubular body part. No device is reported, as the balloon is removed at the conclusion of the procedure.

The qualifier Bifurcation is reported when the intervention is performed for stenoses (narrowing) located in a main coronary artery and an adjoining side-branch vessel called a bifurcation blockage or bifurcation lesion.

Focus Point

The coronary arteries are classified as a single body part that is further specified by the number of arteries treated.

Separate the number of arteries treated in the same manner. Assign the Coronary Artery body part value based on this number. Assign additional code(s) for arteries treated with a different device or qualifier value.

Coding Guidance

AHA: 2015, 4Q, 18; 2015, 3Q, 8; 2015, 2Q, 3; 2014, 2Q, 4

Cystectomy (Bladder)

Body System

Urinary System

PCS Root Operations

Excision

Resection

Root Operation Tables

ØTB Excision, Urinary System

ØTT Resection, Urinary System

Body Part

Bladder

Approaches

Open

Percutaneous Endoscopic

Via Natural or Artificial Opening

Via Natural or Artificial Opening Endoscopic

Qualifiers

Diagnostic (Excision)

No Qualifier

Description

A cystectomy is a surgical procedure commonly used to treat bladder cancer. This procedure may involve removing all or part of the bladder.

Excision

The removal of a portion of diseased or damaged bladder tissue is reported with the root operation Excision. Using an Open approach, the physician makes an incision in the skin above the pubic bone and cuts the corresponding muscles, fat, and fibrous membranes (fascia) to access the bladder. The bladder and the major vesical blood vessels are mobilized, and the physician incises the bladder wall to access the diseased or damaged bladder tissue. After removing the tissue, the physician inserts catheters into the bladder and urethra and sutures the bladder tissues. The physician performs layered closure and inserts a drain tube, bringing it out through a separate stab incision in the skin. The cystectomy procedure may be complicated because of prior administration of radiation, a previous surgery, or difficult access to the diseased or damaged bladder tissue.

The approach may also be Via Natural or Artificial Opening Endoscopic. The physician examines the urinary collecting system with a cystourethroscope passed through the urethra into the bladder and excises a tumor, lesion, or other tissue of the bladder. The physician removes the instruments and cystourethroscope.

Resection

The root operation Resection is reported when a total cystectomy is performed. Using an Open approach to access the bladder, the physician makes an incision in the skin of the lower abdomen and cuts the corresponding muscles, fat, and fibrous membranes (fascia). In some cases, the physician dissects and ties (ligates) the hypogastric and vesical vessels and severs the bladder from the urethra, rectum, surrounding peritoneum, vas deferens, and prostate (if applicable). After removing the bladder and controlling bleeding, the physician inserts drain tubes and performs layered closure. In other cases, the physician bilaterally removes the pelvic lymph nodes.

In a Percutaneous Endoscopic approach, several small incisions along with laparoscope are used to access the bladder. The Percutaneous Endoscopic approach employs the same principles as the Open approach.

Focus Point

In a radical cystectomy, the surgery may involve removal of the bilateral pelvic lymph nodes, bladder, and, in some cases, the urethra. In men, the prostate gland and seminal vesicles may also be removed and in women, the uterus and ovaries, if present. Code separately any organs or structures that are actually removed and for which there is a distinctly defined body part.

Focus Point

ICD-10-PCS code assignment depends on the objective of the procedure (therapeutic or diagnostic). If a partial bladder excision (cystectomy) is documented as both therapeutic and diagnostic, both the biopsy (diagnostic) and the more definitive (therapeutic) treatment may be reported, according to ICD-10-PCS guideline B3.4b. However, surgical specimens are routinely sent to pathology for study without necessarily being considered diagnostic. If the documentation is unclear, query the physician.

Insertion, Spinal Stabilization Device

Body Systems

Upper Joints

Lower Joints

PCS Root Operation

Insertion

Root Operation Tables

ØRH Insertion, Upper Joints

ØSH Insertion, Lower Joints

Body Parts

Cervical Vertebral Joint

Cervicothoracic Vertebral Joint

Thoracic Vertebral Joint

Thoracolumbar Vertebral Joint

Lumbar Vertebral Joint

Lumbosacral Joint

Approaches

Open

Percutaneous

Devices

Spinal Stabilization Device, Interspinous Process

Spinal Stabilization Device, Pedicle-Based

Spinal Stabilization Device, Facet Replacement

Description

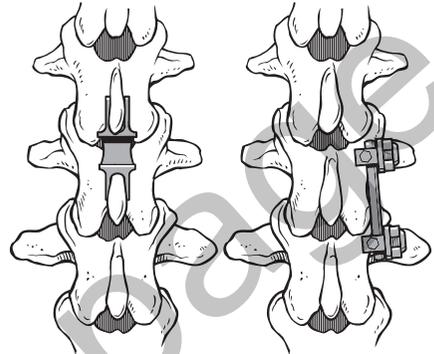
Although spinal fusion has been the gold standard for the treatment of many pathologies of the spine, newer technologies are being continually tested and reviewed. Spinal stabilization devices, all relatively newer technologies, are constantly being updated and are most often used in the lumbar spine. A spinal stabilization device provides stability while allowing for some movement within the affected area of the spine. The root operation Insertion is used to report the use of these devices along with the appropriate device value.

There are three types of spinal stabilization devices, each reported with a specific PCS device value:

- Spinal Stabilization Device, Interspinous Process. These devices act as spacers that open up space for nerve endings to pass through and are used to decompress spinal stenosis in lieu of spinal fusion.
- Spinal Stabilization Device, Pedicle-Based. These devices use flexible, movable, and even inflatable rods inserted into the pedicles to stabilize the spine. One of the most frequently employed systems currently in use is Dynesys, which uses

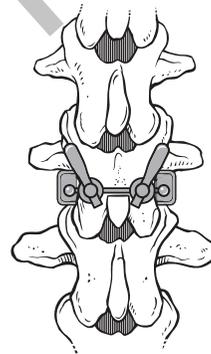
screws and cords. It is used both adjunct to fusion and as a stand-alone procedure.

Spinal Stabilization Devices



Interspinous Process Device

Pedicle-Based Device



Facet Replacement Device

- Spinal Stabilization Device, Facet Replacement. These devices are used to reduce facet pain from spinal stenosis and replace facet joints while maintaining spinal movement.

Focus Point

Code separately any concurrent spinal fusion procedure.

Introduction, Antineoplastic Agent, Hepatic Artery

See also, Chemoembolization, Hepatic Artery, in the Medical and Surgical chapter.

See also, Insertion, Hepatic Artery Infusion Device

Body System

Physiological Systems and Anatomical Regions

PCS Root Operation

Introduction

Root Operation Table

3E0 Introduction, Physiological Systems and Anatomical Regions

Body System/Region

Peripheral Artery

Approach

Percutaneous

Substance

Antineoplastic

Qualifier

Other Antineoplastic

Description

Liver cancer may be treated by delivering antineoplastic substances directly to the tumor site via a catheter inserted into the hepatic artery. This delivery method minimizes side-effects, like nausea and vomiting, and maximizes the cancer-killing properties of the drugs. Antineoplastic substances may be combined with embolic material that not only destroys cancer cells but also cuts off the blood supply to the tumor. Delivery of an antineoplastic substance alone is referred to as hepatic artery infusion (HAI), while delivery of both an antineoplastic and embolic material is referred to as chemoembolization. Chemoembolization requires two codes, one from the Administration section to report the introduction of the antineoplastic and embolic material and a second from the Medical/Surgical section to report the

embolization procedure. The Introduction component is described here. Introduction is defined as putting in or on a therapeutic, diagnostic, nutritional, physiological, or prophylactic substance except blood or blood products.

Prior to the HAI procedure, a separate procedure is performed in which a catheter is placed in the hepatic artery via an open or laparoscopic approach and a subcutaneous pump is placed to deliver the antineoplastic substance.

Before the chemoembolization procedure, diagnostic tests are performed to demonstrate patency of the portal vein to ensure the patient will have an adequate blood supply to the liver after treatment. With the patient under local anesthesia and mild intravenous sedation, the physician inserts a catheter percutaneously via the femoral artery and threads it into the hepatic artery. Angiography is then performed to identify the branches of the hepatic artery that supply blood to the tumor. Smaller catheters are then threaded into these branches, followed by injection of the antineoplastic or embolic chemotherapy mixture. Embolic material may consist of tiny microbeads or microspheres, a viscous collagen agent, gelatin sponges, or polyvinyl alcohol (PVA) particles.

Focus Point

The insertion of the hepatic artery infusion device is reported with the root operation Insertion from the Medical and Surgical Section. For a description of the insertion procedure for HAI, see Insertion, Hepatic Artery Infusion Device.

The embolization component of the procedure is reported with the root operation Occlusion from the Medical and Surgical Section. For a description of the embolization component, see Chemoembolization, Hepatic Artery.

Coding Guidance

AHA: 2015, 1Q, 38; 2014, 3Q, 26

Alphabetic Index

A

- abdomen 235, 354, 358
- abdomen muscle
 - left 117, 244
 - right 117, 244
- abdominal aorta 94, 106, 255
- abdominal artery 107
- abdominal wall 235, 323, 324
- abdominoplasty 81, 235
- ablation
 - cardiac 82
 - endometrial 83
- abortion 311, 312
- adenoidectomy (without tonsillectomy) 84
- adenoids 84, 290
- adenosine sestamibi planar scan, heart muscle (technetium) 366
- adjustment, cardiac pacemaker lead 85
- alveoloplasty 86
- alveolotomy 87
- amniocentesis 313
- ampulla of vater 212, 213
- amputation
 - below knee 88
 - foot and toe ray 89
 - toe 90
- amygdalohippocampectomy 91
- anal sphincter 147, 149
- anastomosis, billroth I 92
 - see also anastomosis, billroth II
- anastomosis, billroth II 93
 - see also billroth I anastomosis
- anatomical orifices 323
- anorectal 323
- ear 323
- female genital tract 323
- mouth and pharynx 323
- nasal 323
- urethra 323
- anatomical regions 323, 324, 354, 358, 362, 368
 - abdomen 354, 358
 - abdominal wall 323, 324
 - back 323, 324
 - central artery 332
 - central vein 332
 - cervical 354, 358
 - chest wall 323, 324
 - coronary artery 332
 - face 323, 324
 - finger, left 323, 324
 - finger, right 323, 324
 - foot, left 323, 324
 - foot, right 323, 324
 - hand, left 323, 324
 - hand, right 323, 324
 - head 323, 324, 354, 358
 - head and neck 356, 357
 - inguinal region, left 323, 324
 - inguinal region, right 323, 324
 - joints 330
 - lower arm, left 323, 324
 - lower arm, right 323, 324
 - lower extremity 354, 356, 357, 358
 - left 323, 324
 - right 323, 324
 - lower leg
 - left 323, 324
 - right 323, 324
 - lumbar 354, 358
 - neck 323, 324
 - pelvis 354, 358
 - peripheral artery 329, 332
 - peripheral vein 326, 332
 - peritoneal cavity 325
 - pleural cavity 331
 - rib cage 354, 358
 - sacrum 354, 358
 - spinal canal 327
 - thoracic 354, 358
 - thumb
 - left 323, 324
 - right 323, 324
 - toe
 - left 323, 324
 - right 323, 324
 - trunk 357
 - upper arm, left 323, 324
 - upper arm, right 323, 324
 - upper extremity 354, 358
 - left 323, 324
 - right 323, 324
 - upper leg
 - left 323, 324
 - right 323, 324
- anatomical regions, general 81, 104, 134, 137, 143, 162, 235, 236, 260, 283, 284, 285
 - abdominal wall 81, 235
 - face 104
 - gastrointestinal tract 143
 - oral cavity and throat 134
 - perineum, female 137, 162
 - perineum, male 162
 - peritoneal cavity 143, 236
 - pleural cavity, left 283, 284, 285
 - pleural cavity, right 283, 284, 285
- anatomical regions, lower extremities 88, 89, 90, 166
 - foot, left 89
 - foot, right 89
 - lower leg, left 88
 - lower leg, right 88
- aneurysmectomy, abdominal aortic, with replacement 94