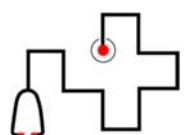




ICD-10-CM/PCS教育訓練課程_外科(II) (胸腔外科、心臟外科、小兒外科) 游斐雲委員

1

心臟外科-轉版後診斷的改變

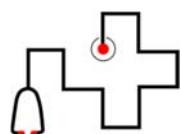


- 頑固性心絞痛(I20.2)
- 主動脈瘤及剝離(I71-)
- 急性心肌梗塞(I21-)
- 心臟衰竭(I50-)
- 高血壓危象(I16-)
- 心房顫動(I48.0~I48.21)



2

急性心肌梗塞(I21-)



2014版	2023版
I21.01 STEMI involving left main coronary artery	I21.01 STEMI involving left main coronary artery
I21.02 STEMI involving left anterior descending coronary artery	I21.02 STEMI involving left anterior descending coronary artery
I21.09 STEMI involving other coronary artery of anterior wall	I21.09 STEMI involving other coronary artery of anterior wall
I21.11 STEMI involving right coronary artery	I21.11 STEMI involving right coronary artery
I21.19 STEMI involving other coronary artery of inferior wall	I21.19 STEMI involving other coronary artery of inferior wall
I21.21 STEMI involving left circumflex coronary artery	I21.21 STEMI involving left circumflex coronary artery
I21.29 STEMI involving other sites	I21.29 STEMI involving other sites
I21.3 STEMI of unspecified site	I21.3 STEMI of unspecified site
I21.4 NSTEMI	I21.4 NSTEMI

I21.A1 :
Code first the underlying cause, such as:
anemia (D50.0-D64.9)
chronic obstructive pulmonary disease (J44.-)
paroxysmal tachycardia (I47.0-I47.9)
shock (R57.0-R57.9)

Type I MI

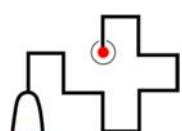
I21.9 Acute myocardial infarction,unspecified

I21.A1 Myocardial infarction type 2

I21.A9 Other myocardial infarction type (含Type 3、4、5)



Acute myocardial infarction type



續發於其他原因致心肌
養供應失衡

MI secondary to
ischemic imbalance

生化檢驗未上升前已死亡
MI resulting in death
without biomarkers

與經皮冠狀動脈介入治療有關
4a.MI related to PCI \leq 48hrs
4b.stent thrombosis
4c.restenosis associated with PCI

冠狀動脈硬化阻塞
Spontaneous MI

type 1
I21.01
~I21.4

type 2
I21.A1

type3
I21.A9

type4
I21.A9

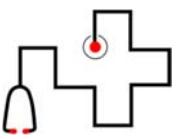
type5
I21.A9

與冠狀動脈繞道手術有關
MI related to CABG \leq
48hrs

AMI type



AMI編碼注意事項



T1MI

- 代碼I21.01~I21.4。四周內再發生type 1或未明示AMI編碼I22。無標示急性心肌梗塞的類型時，**預設**編於type1。

T2MI

- 需先編潛在原因代碼，例如：貧血、慢性阻塞性肺病、陣發性心動過速等，續編AMI代碼I21.A1。

T3MI

- 尚未檢驗心肌生化標記或心肌生化標記還未上升前，就已死亡，編於代碼I21.A9。

T4MI

- 先編代碼I97.190或I97.790，續編AMI代碼I21.A9。

➤ I97.190心臟手術後之其他醫療處置後心臟功能障礙

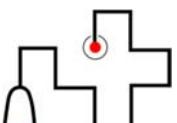
➤ I97.790心臟手術時其他術中心臟功能障礙

➤ Code also例如：stent thrombosis (T82.867-) occlusion of CABG (T82.218-)

T5MI



Readmitted with a new type2 AMI



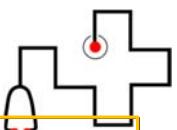
- When a patient is **readmitted** to the hospital with **a new type2 acute myocardial infarction** occurring **within four weeks** of either a previous type 1 or type 2 acute myocardial infarction?



AHA2017,Q4,P13-14



NSTEMI secondary to stent thrombus



Q

- A patient, who is status post coronary angioplasty **with stent placement** in the LAD **two days prior**, is readmitted for a non-ST elevation myocardial infarction (NSTEMI) **due to thrombus in the stent**. (AHA2019,Q2,P32-33)

A

- I97.190, Other postprocedural cardiac functional disturbances following cardiac surgery (心臟手術後之其他醫療處置後心臟功能障礙)
- T82.867A, Thrombosis due to cardiac prosthetic devices, implants and grafts, initial encounter (源於心臟裝置物、植入物及移植植物所致之血栓形成之初期照護)
- I21.A9, Other myocardial infarction type. (其他型心肌梗塞)

I21.A9 :

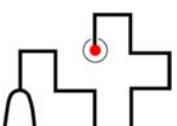
Code first, if applicable, postprocedural myocardial infarction following cardiac surgery (I97.190), or postprocedural myocardial infarction during cardiac surgery (I97.790)

I21.A9 :

Code also complication, if known and applicable, such as:
(acute) stent occlusion (T82.897-)
(acute) stent stenosis (T82.855-)
(acute) stent thrombosis (T82.867-)
cardiac arrest due to underlying cardiac condition (I46.2)
complication of percutaneous coronary intervention (PCI)(I97.89)
occlusion of coronary artery bypass graft (T82.218-)



多重原因的AMI



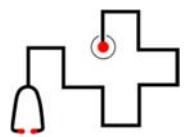
- A patient was admitted secondary to an acute non-ST elevated myocardial infarction (NSTEMI) and underwent percutaneous coronary intervention.
- the previously placed stent in the right coronary artery (RCA) and the distal marginal branch of the circumflex artery was dilated and stented.
- The provider documented **NSTEMI due to native CAD and in-stent restenosis of the RCA**.

➤ 需2個MI代碼完整描述病情。

2014	2023
T82.857A, Stenosis of cardiac prosthetic devices, implants and grafts, initial encounter	T82.855A, Stenosis of coronary artery stent, initial encounter
I21.4, Non-ST elevation myocardial infarction	I21.4, Non-ST elevation myocardial infarction I21.A9, Other myocardial infarction type
I25.10, Atherosclerotic heart disease of native coronary artery without angina pectoris	I25.10, Atherosclerotic heart disease of native coronary artery without angina pectoris



頑固性心絞痛(I20.2)



- I20.0 Unstable angina
- I20.1 Angina pectoris with documented spasm
- I20.2 Refractory angina pectoris**
- I20.8 Other forms of angina pectoris
- I20.9 Angina pectoris, unspecified

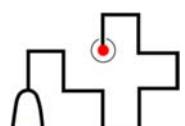
頑固性心絞痛(refractory angina pectoris)。代碼I20.2。是指因不可逆性原因引起的心絞痛，且不能通過藥物、經皮冠狀動脈介入治療(PCI)或冠狀動脈繞道術(CABG)的組合來控制。

CAD新增Refractory angina pectoris相關代碼

CAD I25-	Native I25.10-I25.11		Angina
			Non angina
	CABG I25.70-至I25.73- I25.79- I25.810	Auto	Angina
			Non angina
	Transplanted heart I25.75-至I25.76-、 I25.811、I25.812	Non auto	Angina
			Non angina
	Native		Angina
	CABG		Non angina



冠狀動脈手術的身體部位值變動(處→條)

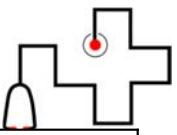


From	To
Body Part	Body Part
0 Coronary Artery, One Site	0 Coronary Artery, One Artery
1 Coronary Artery, Two Sites	1 Coronary Artery, Two Arteries
2 Coronary Artery, Three Sites	2 Coronary Artery, Three Arteries
3 Coronary Artery, Four or More Sites	3 Coronary Artery, Four or More Arteries

➤ 冠狀動脈手術的身體部位值從病兆數量修改為動脈數量，包含：
Bypass(1), Dilation(7), Extirpation(C), Fragmentation(F),
Insertion(H), Release(N), Repair(Q), Reposition(S), Supplement(U)



冠狀動脈繞道術-新增手術途徑和裝置物



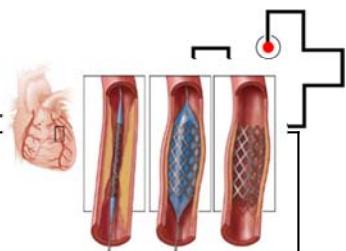
0 Medical and Surgical
2 Heart and Great Vessels
1 Bypass

➤ CABG新增手術途徑和裝置物。

Body Part	Approach	Device	Qualifier
0 Coronary Artery, One Artery 1 Coronary Artery, Two Arteries 2 Coronary Artery, Three Arteries 3 Coronary Artery, Four or More Arteries	0 Open 4 Percutaneous Endoscopic (新增)	8 Zooplastic Tissue (新增) 9 Autologous Venous Tissue A Autologous Arterial Tissue J Synthetic Substitute K Nonautologous Tissue Substitute	3 Coronary Artery 8 Internal Mammary, Right 9 Internal Mammary, Left C Thoracic Artery F Abdominal Artery W Aorta
		Z No Device	3 Coronary Artery 8 Internal Mammary, Right 9 Internal Mammary, Left C Thoracic Artery F Abdominal Artery



PTCA Body part和Device的改變



0 Medical and Surgical
2 Heart and Great Vessels
7 Dilation

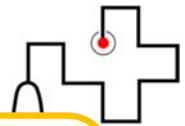
Body Part	Approach	Device	Qualifier
0 Coronary Artery, One Artery 1 Coronary Artery, Two Arteries 2 Coronary Artery, Three Arteries 3 Coronary Artery, Four or More Arteries	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	4 Intraluminal Device, Drug-eluting 5 Intraluminal Device, Drug-eluting, Two 6 Intraluminal Device, Drug-eluting, Three 7 Intraluminal Device, Drug-eluting, Four or More D Intraluminal Device E Intraluminal Device, Two F Intraluminal Device, Three G Intraluminal Device, Four or More T Intraluminal Device, Radioactive Z No Device	6 Bifurcation Z No Qualifier

治療冠狀動脈body part由病兆數(處)修改為動脈數(條)

PTCA device
新增塗藥和非塗藥支架具體數量



PTCA with stents

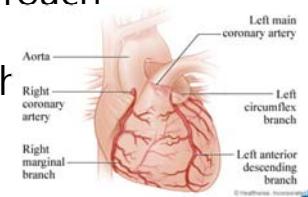


Q

- The patient underwent placement of **two overlapping drug-eluting** stents to treat a long lesion in the **left anterior descending** coronary artery with another **drug-eluting stent** placed in the **left circumflex** coronary artery. In addition, **two nondrug-eluting stents** were placed in the **right coronary artery** to treat two separate lesions.

A

- 027136Z, **Dilation** of Coronary Artery, Two Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Approach
(經皮**兩條**冠狀動脈擴張術，使用**三個塗藥腔內裝置**)
- 02703EZ, **Dilation** of Coronary Artery, One Artery with Two Intraluminal Devices, Percutaneous Approach
(經皮**一條**冠狀動脈擴張術，使用**兩個管腔內裝置**)

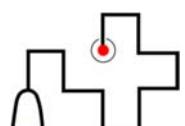


➤ PTCA Device值不同，冠狀動脈數量分開累計並計算支架數量



13

胸主動脈剝離和瘤(I71.0-&I71.1-)



2014版

I71.01 Dissection of thoracic aorta

2023版 增列部位代碼

I71.010 Dissection of **ascending aorta**

I71.011 Dissection of **aortic arch**

I71.012 Dissection of **descending thoracic aorta**

I71.019 Dissection of thoracic aorta, unspecified

2014版

I71.1 Thoracic aortic aneurysm, ruptured

I71.2 Thoracic aortic aneurysm, without rupture

2023版

I71.10 Thoracic aortic aneurysm, ruptured, unspecified

I71.11 Aneurysm of the **ascending aorta**, ruptured

I71.12 Aneurysm of the **aortic arch**, ruptured

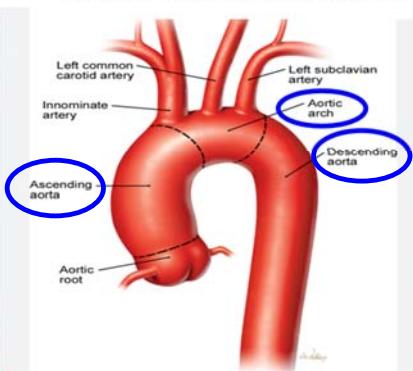
I71.13 Aneurysm of the **descending thoracic aorta**, ruptured

I71.20 Thoracic aortic aneurysm, without rupture, unspecified

I71.21 Aneurysm of the **ascending aorta**, without rupture

I71.22 Aneurysm of the **aortic arch**, without rupture

I71.23 Aneurysm of the **descending thoracic aorta**, without rupture



➤ 診斷：DeBakey type 1 aortic dissection, involving the ascending aorta, aortic arch, and descending thoracic aorta

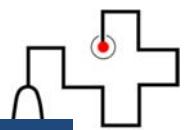
編碼：I71.010、I71.011、I71.012

AHA2024,Q2,P17



14

腹主動脈瘤(I71.3-&I71.4-)



➤ 疾病部位細分：Abdominal aortic aneurysm, I71.3、I71.4

2014版

I71.3 Abdominal aortic aneurysm, ruptured

I71.4 Abdominal aortic aneurysm, without rupture

2023版 腹主動脈瘤根據與腎動脈的關係來描述

I71.30 Abdominal aortic aneurysm, ruptured, unspecified

I71.31 Pararenal(腎旁) abdominal aortic aneurysm, ruptured

I71.32 Juxtarenal (近腎) abdominal aortic aneurysm, ruptured

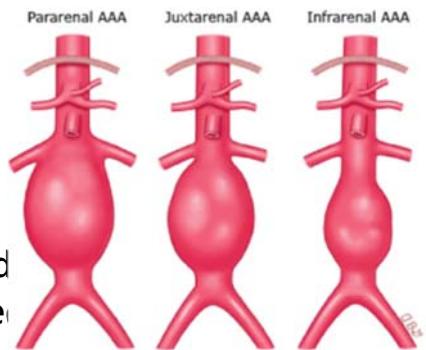
I71.33 Infrarenal(腎下) abdominal aortic aneurysm, ruptured

I71.40 Abdominal aortic aneurysm, without rupture, unspecified

I71.41 Pararenal abdominal aortic aneurysm, without rupture

I71.42 Juxtarenal abdominal aortic aneurysm, without rupture

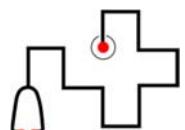
I71.43 Infrarenal abdominal aortic aneurysm, without rupture



➤ Suprarenal AAA
編I71.41
(AHA2024,Q2,P16)



胸腹主動脈瘤(I71.5-&I71.6-)



➤ 疾病部位細分：Thoracoabdominal aortic aneurysm, I71.5、I71.6

2014版

I71.5 Thoracoabdominal aortic aneurysm, ruptured

I71.6 Thoracoabdominal aortic aneurysm, without rupture

2023版

I71.50 Thoracoabdominal aortic aneurysm, ruptured, unspecified

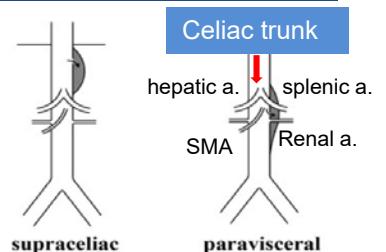
I71.51 Supraceliac(上腹部)aneurysm of the abdominal aorta, ruptured

I71.52 Paravisceral(內臟旁) aneurysm of the abdominal aorta, ruptured

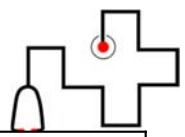
I71.60 Thoracoabdominal aortic aneurysm, without rupture, unspecified

I71.61 Supraceliac aneurysm of the abdominal aorta, without rupture

I71.62 Paravisceral aneurysm of the abdominal aorta, without rupture



胸主動脈瘤置換手術-新增細部位



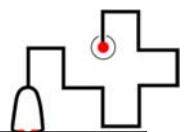
0 Medical and Surgical
2 Heart and Great Vessels
R Replacement:

➤ Thoracic Aorta 區分：
Ascending/Arch(X) 和 Descending(W)

Body Part	Approach	Device	Qualifier
W Thoracic Aorta, Descending	0 Open 4 Percutaneous Endoscopic	7 Autologous TissueSubstitute 8 Zooplastastic Tissue J Synthetic Substitute K Nonautologous TissueSubstitute	Z No Qualifier
X Thoracic Aorta, Ascending/Arch			



腹主動脈瘤手術-新增裝置物



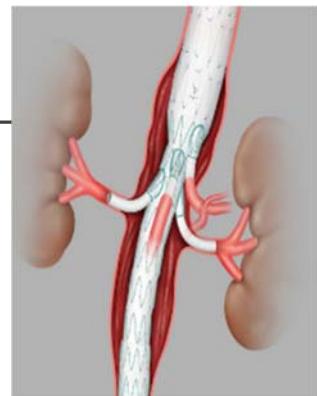
0 Medical and Surgical
4 Lower Arteries
V Restriction

➤ Endovascular aneurysm repair (EVAR)
依使用幾條動脈分支或有孔型管腔內裝置再分類

Body Part	Approach	Device	Qualifier
0 Abdominal Aorta	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	C Extraluminal Device E Intraluminal Device, Branched or Fenestrated, One or Two Arteries F Intraluminal Device, Branched or Fenestrated, Three or More Arteries Z No Device	Z No Qualifier



TAAA repair with t-branch stent graft



Thoracoabdominal aortic aneurysm s/p t-branch TAEVAR+ EVAR

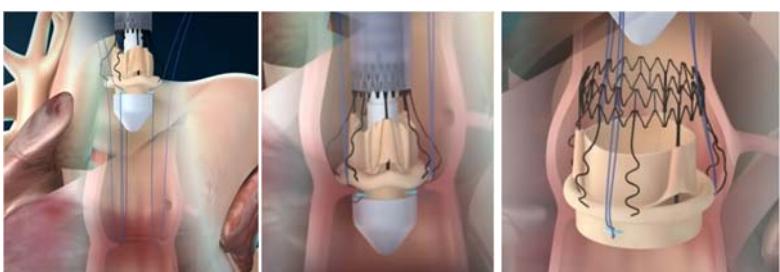
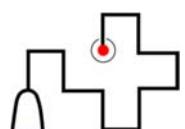
1. Zenith t-Branch Thoracoabdominal Endovascular Graft
(stenting to celiac trunk, SMA, right renal artery, left renal artery)
2. EVAR extension
3. right iliac limb extension with TFLE-24-56-ZT
4. left iliac limb extention with Be graft 16*38

2014	2023
02VW3DZ, Restriction of Thoracic Aorta with Intraluminal Device, Percutaneous Approach	02VW3DZ, Restriction of Thoracic Aorta, Descending with Intraluminal Device, Percutaneous Approach
04V03DZ , Restriction of Abdominal Aorta with Intraluminal Device, Percutaneous Approach	04V03FZ , Restriction of Abdominal Aorta with Branched or Fenestrated Intraluminal Device, Three or More Arteries, Percutaneous Approach



19

AVR with Perceval sutureless



- 比傳統正中胸骨切開術較小的切口
- 創新無縫線快速展開的新型瓣膜，牛心包膜小葉位於鎳鈦合金框架中
- 三道引導縫線將瓣膜固定到位，即可移除縫線快速部署瓣膜，縮短瓣膜置換術手術時間

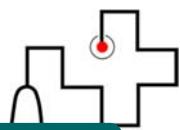
02R, Replacement of Heart and Great Vessels

Body Part	Approach	Device	Qualifier
F Aortic Valve	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	8 Zooplastic Tissue	N Rapid Deployment Technique Z No Qualifier



20

VA-ECMO set-up



➤ 第5位碼Duration選項Intraoperative,不局限在手術室執行的處置

5 Extracorporeal or Systemic Assistance and Performance

A Physiological Systems

1 Performance

➤ ECMO第7位碼依管路連接方式再分類

Body Part	Duration	Function	Qualifier
5 Circulatory	2 Continuous A Intraoperative	2 Oxygenation	F Membrane, Central G Membrane, Peripheral Veno-arterial H Membrane, Peripheral Veno-venous

- 08:20 skin incision, 08:33 commence ECMO

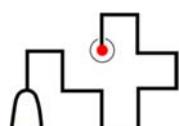
- 17Fr A cannula at LCFA, fix 13cm

- 21Fr V cannula at LCFV, fix 43cm

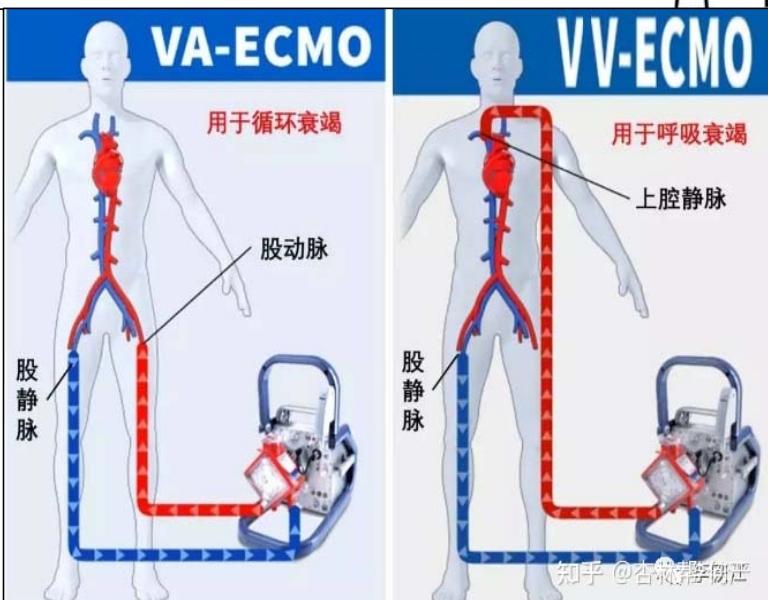
- On reperfusion catheter to distal LSFA.

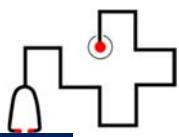


ECMO連接方式



- **Central (5A1522F)** : 以開胸手術插管，直接對右心房和主動脈進行手術插管，涉及動脈和靜脈開放插入，提供心肺支持。
- **Venous-Arterial (VA) Peripheral (5A1522G)** : 經皮股動脈和股靜脈插入，用於心臟和肺臟有問題個案，提供呼吸和循環支持。
- **Venous-Venous(VV) Peripheral (5A1522H)** : 經皮兩個靜脈插入，一個位於上部靜脈，一個位於下部靜脈，於僅肺部問題時使用。





心臟衰竭(I50-)

➤ 新代碼區分右和左心衰竭有助於患者追蹤，因兩者治療不同

I50.1	<u>Left</u> ventricular failure
I50.2	<u>Systolic</u> heart failure
I50.3	<u>Diastolic</u> heart failure
I50.4	<u>Combined systolic and diastolic</u> heart failure
I50.8	<u>Other</u> heart failure
I50.9	Heart failure, <u>unspecified</u>
➤ I50.2、I50.3、I50.4 第5位碼細分： 0 Unspecified, 1 Acute, 2 Chronic, 3 Acute on chronic	

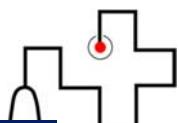
I50.810	Right heart failure, unspecified
I50.811	Acute right heart failure
I50.812	Chronic right heart failure
I50.813	Acute on chronic right heart failure
I50.814	Right heart failure due to left heart failure
I50.82	Biventricular heart failure
I50.83	High output heart failure
I50.84	End stage heart failure
I50.89	Other heart failure

區分右心衰竭和左心衰竭有助於患者追蹤，因治療不同。

正常功能的心臟無法滿足身體器官對血液異常高需求時，就會發生

對藥物治療產生不耐受性，並出現腎功能惡化和利尿劑抗藥性

心衰竭與左心室射出分率

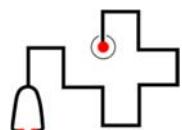


➤ 依據左心室射出分率(ejection fraction, EF)的不同，其病理機轉、對藥物治療反應及預後皆不同。

- 正常收縮分率心衰竭 (heart failure with **preserved** ejection fraction, HFpEF) · 編至diastolic heart failure · 編碼I50.3-
- 正常收縮分率心衰竭 (heart failure with **normal** ejection fraction, HFnEF) · 編至diastolic heart failure · 編碼I50.3-
- 低收縮分率心衰竭 (heart failure with **reduced** ejection fraction, HFrEF) · 編至systolic heart failure · 編碼I50.2-
- 中度收縮分率心衰竭 (heart failure with **midrange** ejection fraction, HFmrEF) · 編至systolic heart failure · 編碼I50.2-



高血壓危象(I16-)



• 高血壓危象 (hypertensive crisis) I16.9

Code also any identified hypertensive disease (I10-I15)

I16.0 Hypertensive urgency

I16.1 Hypertensive emergency

I16.9 Hypertensive crisis, unspecified

	收縮壓(mmhg)	舒張壓(mmhg)
正常血壓	<120	和 <80
高血壓前期	120~139	或 80~89
第一期高血壓	140~159	或 90~99
第二期高血壓	>=160	或 >=100
高血壓危象	>180	或 >120

• 高血壓緊急狀況 (hypertensive urgency)

指收縮壓大於180 mmHg或舒張壓大於120 mmHg，可能伴隨輕微頭痛，但沒有合併器官損傷的徵象。

I16.0

• 高血壓急症(hypertensive emergency)

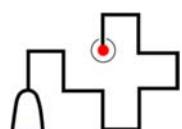
為顯著血壓上升並合併有急性、進行性標的器官受損，例如：高血壓腦病變、急性心肌缺血、急性腎損傷等。

I16.1

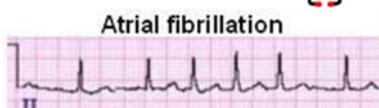
➤ Basal ganglia hemorrhage and hypertensive emergency. (AHA2016,Q4,P27-28)
編碼I61.0 + I16.1 Hypertensive emergency + I10 hypertension



心房顫動(I48.0~I48.21)



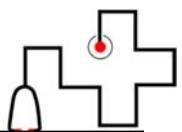
- I48.0 Paroxysmal atrial fibrillation
- I48.11 Longstanding persistent atrial fibrillation
- I48.19 Other persistent atrial fibrillation
- I48.20 Chronic atrial fibrillation, unspecified
- I48.21 Permanent atrial fibrillation
- I48.91 Unspecified atrial fibrillation



• Paroxysmal(陣發性)	• Chronic(慢性)	• Persistent (持續性) : 發作超過7日小於1年	• Permanent (永久性)
• 發作可能幾秒到7日 大多在24小時內自行緩解。	• 發作持續時間 超過1周 • 以抗心律不整藥物治療	• Longstanding persistent長期持續： 發作至少持續1年(藥物通常無效) • 以抗心律不整藥物或其他治療，例如： electrical cardioversion catheter ablation pacemaker implantation	• 連續發作，沒有結束 • 對治療無反應。



PTA with Drug-Coated Balloon



0 Medical and Surgical
4 Lower Arteries
7 Dilation

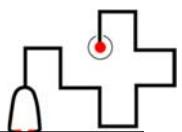
➤ Percutaneous transluminal angioplasty(PTA)
新增第七位碼塗藥氣球

Body Part	Approach	Device	Qualifier
Common Iliac Artery (C,D) Internal Iliac Artery (E,F) External Iliac Artery (H,J) Femoral Artery (K,L) Popliteal Artery (M,N) Anterior Tibial Artery (P,Q) Posterior Tibial Artery (R,S) Peroneal Artery (T,U) Foot Artery (V,W) Lower Artery (Y)	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	4 Intraluminal Device, Drug-eluting D Intraluminal Device Z No Device	1 Drug-Coated Balloon Z No Qualifier

- Angioplasty of the right femoral artery using a drug-coated balloon with stent placement.
- 編047K3D1,經皮右股動脈塗藥氣球擴張術,使用管腔內裝置(AHA2015,Q4,P7)



PTA with stents



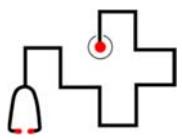
0 Medical and Surgical
4 Lower Arteries
7 Dilation

➤ Percutaneous transluminal angioplasty(PTA)
第六位碼依塗藥和非塗藥支架具體數量再分類

Body Part	Approach	Device	Qualifier
Common Iliac Artery (C,D) Internal Iliac Artery (E,F) External Iliac Artery (H,J) Femoral Artery (K,L) Popliteal Artery (M,N) Anterior Tibial Artery (P,Q) Posterior Tibial Artery (R,S) Peroneal Artery (T,U) Foot Artery (V,W) Lower Artery (Y)	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	5 Intraluminal Device, Drug-eluting, Two 6 Intraluminal Device, Drug-eluting, Three 7 Intraluminal Device, Drug-eluting, Four or More E Intraluminal Device, Two F Intraluminal Device, Three G Intraluminal Device, Four or More	Z No Qualifier

- PTAS at right ATA : ①Deploy DES1 at R'ATA up to 10 atm for 10 secs.
②Deploy DES2 at R'ATA up to 12 atm for 10 secs.
- 編047P35Z,經皮右脛前動脈擴張術 · 使用兩個塗藥腔內裝置





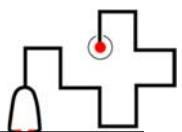
新增X章節代碼-新型塗藥支架

- 代碼X27H385，用於治療周邊動脈疾病的新型支架不同於傳統的塗藥支架，抗再狹窄藥物紫杉醇(paclitaxel)的釋放持續時間明顯長於藥物塗層球囊(drug-coated balloons)和藥物塗層支架(drug-coated stents)

Dilation

- External Iliac
- Face 037R
- Femoral
- Left 047L
 - Sustained Release Drug-e
 - Four or More X27J3C5
 - Three X27J3B5
 - Two X27J395
- Right 047K
 - Sustained Release Drug-eluting Intraluminal Device X27H385
 - Four or More X27H3C5
 - Three X27H3B5
 - Two X27H395

X27H385, Dilation of Right Femoral Artery with Sustained Release Drug-eluting Intraluminal Device, Percutaneous Approach, New Technology Group 5
經皮右股動脈擴張術，使用持續釋放型塗藥腔內裝置，第5群新科技



新增下肢持續釋放型塗藥支架

X New Technology
2 Cardiovascular System
7 Dilation

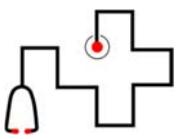
➤ Percutaneous transluminal angioplasty(PTA)
第六位碼依持續釋放型塗藥支架具體數量再分類

Body Part	Approach	Device / Substance /Technology	Qualifier
Femoral Artery (H,J) Popliteal Artery Proximal (K,L) Popliteal Artery Distal (M,N) Anterior Tibial Artery (P,Q) Posterior Tibial Artery (R,S) Peroneal Artery (T,U)	3 Percutane ous	8 Intraluminal Device,Sustained Release Drug-eluting 9 Intraluminal Device,Sustained Release Drug-eluting, Two B Intraluminal Device,Sustained Release Drug-eluting, Three C Intraluminal Device,Sustained Release Drug-eluting, Four or More	5 New Technology Group 5 (第5群新科技)

➤ 持續釋放型塗藥支架有特定部位

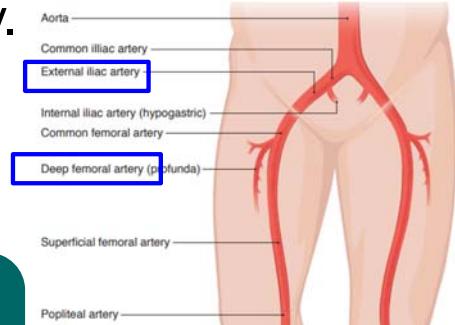


PTA femoral to external iliac artery



- Percutaneous transluminal angioplasty, dilation from the left femoral artery to the external iliac artery with the point of entry at the femoral artery.
- 047J3ZZ, Dilation of Left External Iliac Artery, Percutaneous Approach (經皮左右外髂動脈擴張術)

- 對血管一個連續病灶進行跨多個身體部位的處置，以最接近心臟的血管部位編碼。
- 同時治療多個身體部位血管中的個別病灶，應分別對每個處置進行編碼。

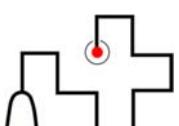


AHA,Q1,P10-13

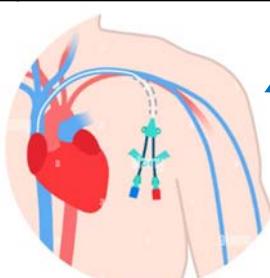
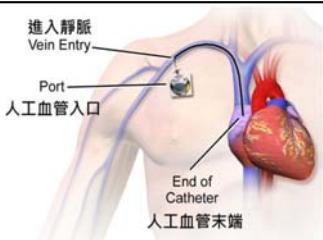


31

血管通路裝置名稱改變



2014版	2023版
Device	Device
W Vascular Access Device, Reservoir (儲存器)	W Vascular Access Device, Totally Implantable (全置入式)
X Vascular Access Device	X Vascular Access Device, Tunneled (隧道式)



隧道導管(tunneled catheter) 在皮下形成導管穿過的隧道，導管有入口和出口部位。



32

Insertion port-a cath

Q

Insertion of a vascular access device ending in the superior vena cava and a port-a cath ?



A

2014版

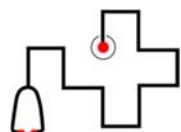
- 02HV33Z, Insertion of Infusion Device into Superior Vena Cava, Percutaneous Approach
(經皮植入上腔靜脈輸液裝置)
- 0JH60XZ, Insertion of Vascular Access Device into Chest Subcutaneous Tissue and Fascia, Open Approach
(開放性植入胸部皮下組織及筋膜
血管通路裝置)

2023版

- 02HV33Z, Insertion of Infusion Device into Superior Vena Cava, Percutaneous Approach
(經皮植入上腔靜脈輸液裝置)
- 0JH60WZ, Insertion of Totally Implantable Vascular Access Device into Chest Subcutaneous Tissue and Fascia, Open Approach (開放性植入胸部皮下組織及筋膜全置入式血管通路裝置)

33

胸腔外科-轉版後診斷的改變

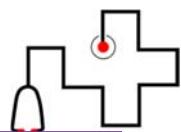


- 縱隔疾病(J98.5-)
- 食道其他特定疾病(K22.8-)
- 胃食道逆流性疾病 (K21-)
- 繢發性肺高壓(I27.2)
- 心包積液(非炎症性)(I31.3)
- 酸中毒(E87.2-)
- 慢性腎臟疾病(N18-)



34

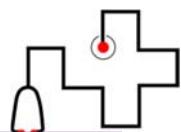
縱隔疾病(J98.5-)



2014	2023
J98.5, Diseases of mediastinum, not elsewhere classified	J98.51, Mediastinitis (縱隔炎)
	J98.59, Other diseases of mediastinum, not elsewhere classified (縱隔疾病，他處未分類)



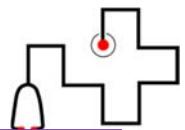
Esophageal polyp (K22.8-)



2014	2023
K22.8, Other specified diseases of esophagus (2014版工具書index找不到特定代碼,2023版已有增列)	K22.81, Esophageal polyp (食道息肉)
	K22.82, Esophagogastric junction polyp (食道胃接合處息肉)
	K22.89, Other specified disease of esophagus (食道其他特定疾病)



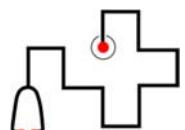
胃食道逆流性疾病 (K21-)



2014	2023
K21.0, Gastro-esophageal reflux disease with esophagitis	K21.00, Gastro-esophageal reflux disease with esophagitis, without bleeding (胃食道逆流性疾病伴有食道炎未伴有出血)
	K21.01, Gastro-esophageal reflux disease with esophagitis, with bleeding (胃食道逆流性疾病伴有食道炎伴有出血)
K21.9, Gastro-esophageal reflux disease without esophagitis	K21.9, Gastro-esophageal reflux disease without esophagitis (胃食道逆流性疾病未伴有食道炎)



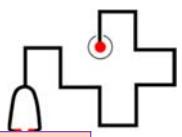
肺高壓類型(I27.0&I27.2-)



- 原發性肺動脈高壓(I27.0) , 也稱為特發性和遺傳性肺高壓。
- 肺高壓是藥物和毒素引起的與先天性心臟病和 HIV 感染有關(I27.21)
- 左心疾病引起的肺高壓 (I27.22) , 繼發於左心衰竭或左心瓣膜疾病。
- 繼發於肺部疾病或缺氧的肺動高壓 (I27.23) , 原因是肺部疾病、呼吸控制受損或高海拔導致的肺泡缺氧。
- 慢性血栓栓塞性肺高壓 (I27.24) 可能由於血栓栓塞、腫瘤或異物引起的肺動脈血管阻塞而發生。
- 上述以外的其他因素引起肺高壓(I27.29) , 例如：血液系統疾病、全身性疾病、代謝障礙、甲狀腺疾病及其他條件。

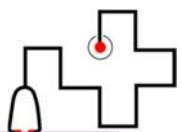
續發性肺高壓編碼順序,依入院的原因排序





續發性肺高壓(I27.2)

2014	2023
I27.2, Other secondary pulmonary hypertension (Group3)→	I27.20, Pulmonary hypertension, unspecified
	I27.21, Secondary pulmonary arterial hypertension (Group1)
	I27.22, Pulmonary hypertension due to left heart disease (Group2)
	I27.23, Pulmonary hypertension due to lung diseases and hypoxia
	I27.24, Chronic thromboembolic pulmonary hypertension (Group4)
	I27.29, Other secondary pulmonary hypertension (Group5)

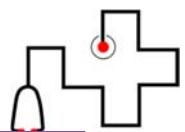


心包積液(非炎性)(I31.3)

2014	2023
I31.3, Pericardial effusion (noninflammatory)	I31.31, Malignant pericardial effusion in diseases classified elsewhere (歸類於他處疾病所致之惡性心包積液)
	I31.39, Other pericardial effusion (noninflammatory) (其他心包積液(非炎性))



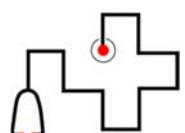
酸中毒(E87.2-)



2014	2023
E87.2, Acidosis	E87.20, Acidosis, unspecified (酸中毒)
	E87.21, Acute metabolic acidosis (急性代謝性酸中毒)
	E87.22, Chronic metabolic acidosis (慢性代謝性酸中毒)
	E87.29, Other acidosis (其他酸中毒)



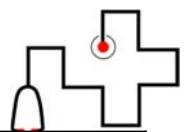
慢性腎臟疾病(N18-)



2014	2023
N18.1, Chronic kidney disease, stage 1	N18.1, Chronic kidney disease, stage 1
N18.2, Chronic kidney disease, stage 2	N18.2, Chronic kidney disease, stage 2
N18.3, Chronic kidney disease, stage 3	輕 中 重
	N18.30, Chronic kidney disease, stage 3 unspecified
	N18.31, Chronic kidney disease, stage 3a
	N18.32, Chronic kidney disease, stage 3b
N18.4, Chronic kidney disease, stage 4	N18.4, Chronic kidney disease, stage 4
N18.5, Chronic kidney disease, stage 5	N18.5, Chronic kidney disease, stage 5
N18.6, End stage renal disease	N18.6, End stage renal disease
N18.9, Chronic kidney disease, unspecified	N18.9, Chronic kidney disease, unspecified



血液透析-改變Duration值



5 Extracorporeal or Systemic Assistance and Performance
A Physiological Systems
1 Performance

AHA2017,Q4,P71-73

Body Part	Duration	Function	Qualifier
D Urinary	0 Single 6 Multiple 7 Intermittent, Less than 6Hours Per Day 8 Prolonged Intermittent, 6-18 hours Per Day 9 Continuous, Greater than18 hours Per Day	0 Filtration	Z No Qualifier

➤ 間歇性血液透析是常規治療方法，末期腎臟病通常每週進行3次，每次約4小時。

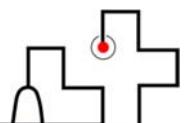
➤ 延長間歇性腎臟替代療法 (PIRRT)，稱為持續低效透析 (SLED) 和延長每日透析 (EDD) 通常每天進行6至18小時，是溫和且具有較低的透析液流速，以幫助維持血液動力學穩定性。

➤ 連續性腎臟替代療法 (CRRT)，也稱為連續性靜脈-靜脈血液透析 (CVVHD) 及連續性靜脈-靜脈血液透析濾過 (CVVHDF)。此操作至少持續18小時，最長可達每天24小時，為最溫和、最緩慢的血液透析形式，用於急性腎損傷導致血流動力學不穩定的患者。



43

Repair diaphragm hernia



0 Medical and Surgical
B Respiratory System
Q Repair

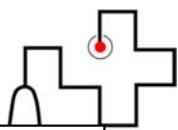
Body Part	Approach	Device	Qualifier
R Diaphragm, Right S Diaphragm, Left(刪) T Diaphragm (增)	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	Z No Device	Z No Qualifier

➤ 取消左和右側橫膈膜，改為1個部位值。例如：
 Destruction, Drainage, Extirpation, Insertion, Release, Repair,
 Reattachment, Supplement, Excision, Resection



44

Thoracoscopic talc pleurodesis



3 Administration

E Physiological Systems and Anatomical Regions

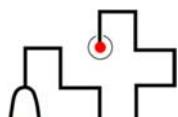
0 Introduction

Body System / Region	Approach	Substance	Qualifier
L Pleural Cavity	3 Percutaneous	G Other Therapeutic Substance	C Other Substance
L Pleural Cavity	4 Percutaneous Endoscopic (2023版新增)	G Other Therapeutic Substance	C Other Substance

- 3E0L4GC, Introduction of Other Therapeutic Substance into Pleural Cavity, Percutaneous Endoscopic Approach (經皮內視鏡肋膜腔其他治療物質輸入) (參看AHA2017,Q4,P69)



肺葉破壞術-新增雷射間質熱療法



0 Medical and Surgical

B Respiratory System

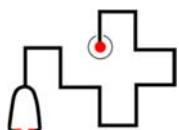
5 Destruction

從RadiationTherapy Section (D),代碼DBY2KZZ 刪除,
改為Medical and Surgical (0)章節

Body Part	Approach	Device	Qualifier
C Upper Lung Lobe, Right D Middle Lung Lobe, Right F Lower Lung Lobe, Right G Upper Lung Lobe, Left H Lung Lingula J Lower Lung Lobe, Left K Lung, Right L Lung, Left M Lungs, Bilateral	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	Z No Device	3 Laser Interstitial Thermal Therapy Z No Qualifier
	7 Via Natural or Artificial Opening 8 Via Natural or Artificial Opening Endoscopic	Z No Device	Z No Qualifier

- 雷射間質熱療 (LITT) · 利用雷射探針產生的熱量破壞目標部位的軟組織。





新增高流量和流速呼吸器輔助

5 Extracorporeal or Systemic Assistance and Performance

A Physiological Systems

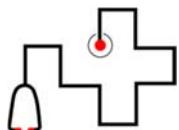
0 Assistance

Body Part	Duration	Function	Qualifier
9 Respiratory	3 Less than 24 Consecutive Hours 4 24-96 Consecutive Hours 5 Greater than 96 Consecutive Hours	5 Ventilation	7 Continuous Positive Airway Pressure 8 Intermittent Positive Airway Pressure 9 Continuous Negative Airway Pressure A High Nasal Flow/Velocity B Intermittent Negative Airway Pressure Z No Qualifier

➤ 高流量鼻導管療法(High Flow nasal cannula, HNFC)可提供氧氣及濕度輸送，也增加纖毛擺動促進痰液排出，使肺浸潤改善，增加氧合

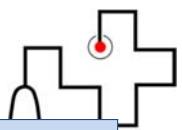


小兒外科-轉版後診斷的改變



- 心房中膈缺損(Q21.1-)
- 房室中膈缺損(Q21.2-)
- 隱睾(Q53.1-&Q53.2-)
- 急性闌尾炎(K35-)
- 麻痺性腸阻塞(K56-)

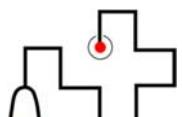




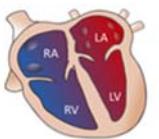
心房中隔缺損(Q21.1-)

2014	2023
Q21.1 Atrial septal defect	Q21.10, Atrial septal defect, unspecified (心房中隔缺損)
	Q21.11, Secundum atrial septal defect (第二中隔缺損) Q21.12, Patent foramen ovale (開放性卵圓孔) → Q21.13, Coronary sinus atrial septal defect (冠狀竇型) Q21.14, Superior sinus venosus atrial septal defect (上靜脈竇型) Q21.15, Inferior sinus venosus atrial septal defect (下靜脈竇型) Q21.16, Sinus venosus atrial septal defect, unspecified (靜脈竇型) Q21.19, Other specified atrial septal defect (其他)
Q21.14 上靜脈竇型 Q21.11 心房第二中隔缺損 Q21.15 下靜脈竇型	
Q21.13 冠狀竇型	

➤ ASD 是畸形,PFO是NB期正常變異, 嬰兒期閉合,
區分代碼有助於疾病監測和研究。



房室中隔缺損(Q21.2-)

2014	2023
Q21.2, Atrioventricular septal defect	Q21.20, Atrioventricular septal defect, unspecified as to partial or complete (未明示部分型或完全型)
 正常	Q21.21, Partial atrioventricular septal defect (部分型)
	Q21.22, Transitional atrioventricular septal defect (移行性)
	Q21.23, Complete atrioventricular septal defect (完全型)



部分型



移行性

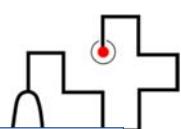


完全型

- 稱為 Endocardial cushion defect 心內膜墊缺損或 common atrioventricular orifice 房室共同口。
- 一種先天性心臟病,心臟胚胎發育過程中心內膜墊衍生結構的異常,特徵是存在共同的房室瓣並伴有房室間隔缺損,造成左右的心房與心室互相相通。



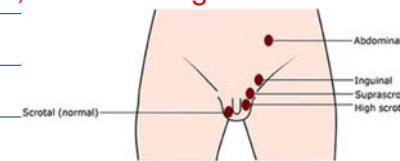
隱睾(Q53.1-&Q53.2-&Q53.9)



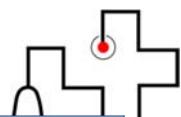
2014	2023
Q53.10 Unspecified undescended testicle, unilateral	
Q53.11 Abdominal testis, unilateral	Q53.111, Unilateral intraabdominal testis Q53.112, Unilateral inguinal testis
Q53.12 Ectopic perineal testis, unilateral	
Q53.13 Unilateral high scrotal testis	
Q53.20 Undescended testicle, unspecified, bilateral	
Q53.21 Abdominal testis, bilateral	Q53.211, Bilateral intraabdominal testes Q53.212, Bilateral inguinal testes
Q53.22 Ectopic perineal testis, bilateral	
Q53.9 Undescended testicle, unspecified	Q53.23 Bilateral high scrotal testes

<https://www.frontiersin.org/journals/endocrinology/articles/10.3389/fendo.2019.00906/full>

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急性闌尾炎(K35-)



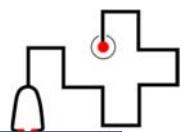
2014	2023
K35.3 Acute appendicitis with localized peritonitis (急性闌尾炎併 <u>局部</u> 腹膜炎)	K35.30 Acute appendicitis with localized peritonitis, without perforation or gangrene (伴有 <u>局部腹膜炎</u> 未伴有穿孔和壞疽) K35.31 Acute appendicitis with localized peritonitis and gangrene, without perforation (伴有 <u>局部腹膜炎和壞疽</u> 未伴有穿孔) K35.32 Acute appendicitis with perforation, localized peritonitis, and gangrene, without abscess (伴有 <u>穿孔和局部腹膜炎</u> 未伴有膿瘍) K35.33 Acute appendicitis with perforation, localized peritonitis, and gangrene, with abscess (伴有 <u>穿孔和局部腹膜炎</u> 伴有 <u>膿瘍</u>)

2014	2023
K35.2 Acute appendicitis with generalized peritonitis (急性闌尾炎併 <u>廣泛性</u> 腹膜炎)	K35.20 Acute appendicitis with generalized peritonitis, without abscess (伴有 <u>廣泛性腹膜炎</u> 未伴有 <u>膿瘍</u>) K35.21 Acute appendicitis with generalized peritonitis, with abscess (伴有 <u>廣泛性腹膜炎</u> 伴有 <u>膿瘍</u>)



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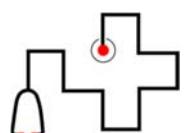
腸沾黏[帶]併阻塞(K56.5-)



2014	2023
K56.5 Intestinal adhesions [bands] with obstruction (postprocedural) (postinfection)	K56.50 Intestinal adhesions [bands], unspecified as to partial versus complete obstruction
	K56.51 Intestinal adhesions [bands], with partial obstruction
	K56.52 Intestinal adhesions [bands] with complete obstruction

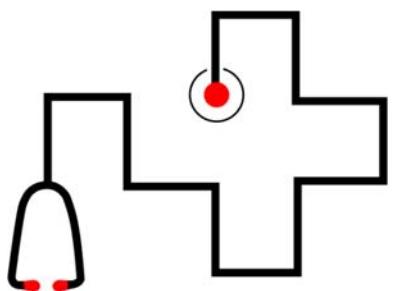


其他及未明示的腸阻塞(K56.6-)



2014	2023
K56.60 Unspecified intestinal obstruction	K56.600, Partial intestinal obstruction, unspecified as to cause K56.601, Complete intestinal obstruction, unspecified as to cause K56.609, Unspecified intestinal obstruction, unspecified as to partial versus complete obstruction
K56.69 Other intestinal obstruction	K56.690, Other partial intestinal obstruction K56.691, Other complete intestinal obstruction K56.699, Other intestinal obstruction unspecified as to partial versus complete obstruction





感謝聆聽 敬請指教

