



Government of **Western Australia**  
Department of **Health**

ICD-10-AM/ACHI/ACS Thirteenth Edition

# *ACS 1904 Complications of surgical or medical care*

## Interactive Learning Session

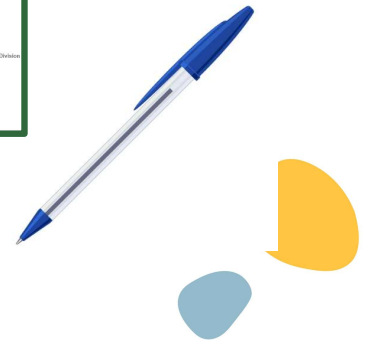
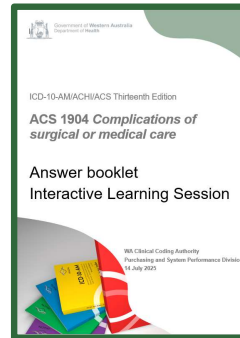
Facilitated by  
WA Clinical Coding Authority

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# Is everyone prepared?

- Do you have:
  - An answer booklet?
  - Something to write with?

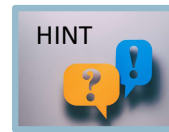


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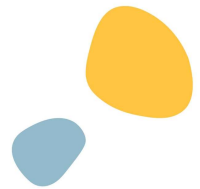
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## In this session ...

- WA Clinical Coding Authority (WACCA)
- 13<sup>th</sup> Edition ACS 1904 *Complications of surgical and medical care*
  - 13 questions, some of which have hints
- Audience questions



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# WA Clinical Coding Authority

Brooke Holroyd



Vana Savietto



Claire Romaro



Jo Ciputra



Rosi Katich



WA Cancer  
Registry Clinical  
Coding Team

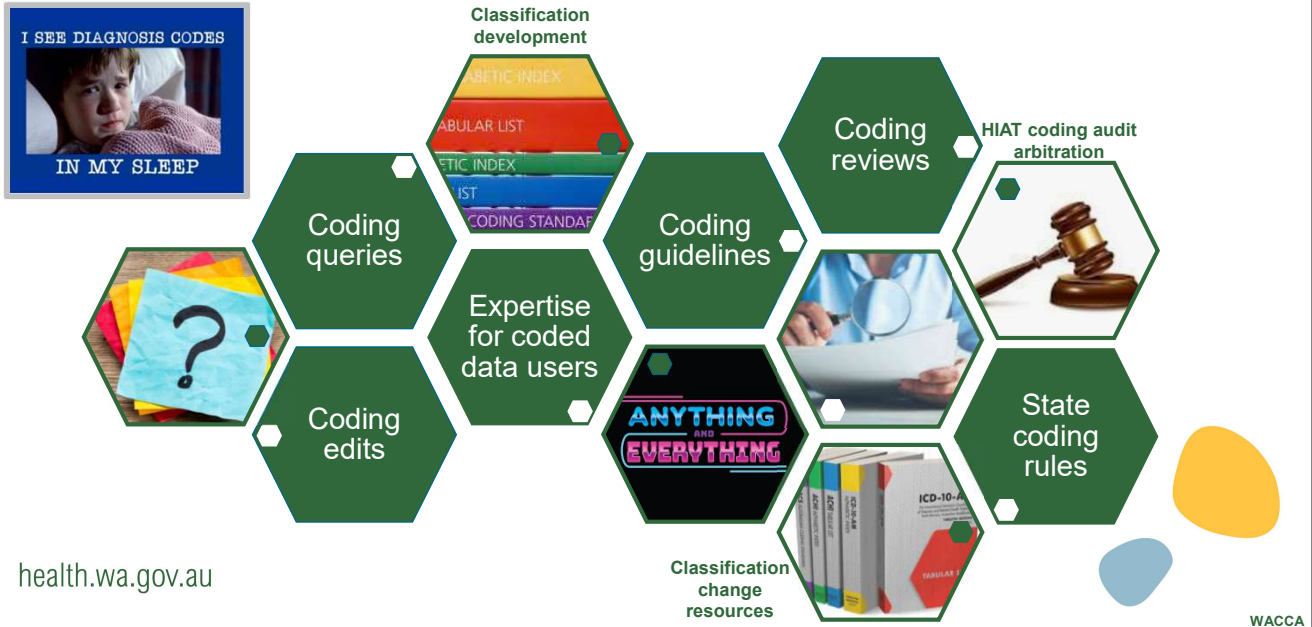
Clinical Classification Team

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- The Clinical Classification Team consists of the WA Clinical Coding Authority (WACCA) and the WA Cancer Registry Clinical Coding Team.
- The WA Cancer Registry Clinical Coding Team registers malignant neoplasms on to the WA Cancer Registry using the International Classification of Diseases for Oncology (ICD-O).
- Brooke Holroyd, Vana Savietto, Jo Ciputra, Claire Romaro and Rosi Katich make up the WA Clinical Coding Authority.
- The work of the WA Clinical Coding Authority is focussed on the ICD-10-AM/ACHI/ACS classification system and AR-DRGs (Australian Refined Diagnosis Related Groups) and this is the type of work that we do ...

# What does WACCA do?



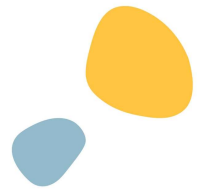
The remit of the WA Clinical Coding Authority is to:

- Respond to clinical coding queries from WA's hospitals (both public and private).
- Process clinical coding edits and develop and refine the clinical coding edits listed in the Hospital Morbidity Data Collection (HMDC) Data Validation Manual.
- Provide expertise to Independent Health and Aged Care Pricing Authority (IHACPA) when they're developing new ICD-10-AM/ACHI/ACS Editions and AR-DRG Versions.
- Provide clinical coding know-how to users of WA's clinical coding data.
- Collaborate with members of the WA Clinical Coding Technical Advisory Group (TAG) to produce WA Coding Rules and WACCA Clinical Coding Guidelines.
- Act as the arbitrator for Diagnosis Related Group (DRG) and clinical coding audits conducted by the Health Information Audit Team (HIAT), where there's disagreement between the hospital being audited and the HIAT.

- Conduct clinical coding and/or clinical documentation 'reviews' which are similar to audits but without formal performance reporting or mandatory recommendations to follow.
- And like a lot of the people here today, we get called upon to advise on anything clinical coding related, or even remotely clinical coding related!

# Let's begin ...

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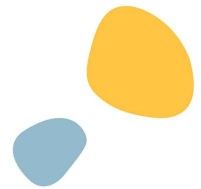
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## Q1 Take a guess!

**Question:** In a 1-month sample of public hospital episodes in WA, can you guess which complication code appears most often in the data?

- A** T81.3 Disruption of operation wound, NEC
- B** T82.84 Stenosis due to insertion of internal cardiac and vascular devices, implants and grafts
- C** T81.0 Haemorrhage and haematoma complicating a procedure, NEC
- D** T81.4 Postprocedural wound infection, NEC

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## Q1 Answer

**Question:** In a 1-month sample of public hospital episodes in WA, can you guess which complication code appears most often in the data?

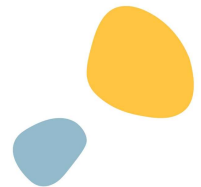
**A** T81.3 Disruption of operation wound, NEC

**B** T82.84 Stenosis due to insertion of internal cardiac and vascular devices, implants and grafts

☒ **C** T81.0 Haemorrhage and haematoma complicating a procedure, NEC

**D** T81.4 Postprocedural wound infection, NEC

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- The answer is: **C - T81.0 Haemorrhage and haematoma complicating a procedure, not elsewhere classified.**
- The next most common complication is T81.4 *Postprocedural wound infection, not elsewhere classified.*

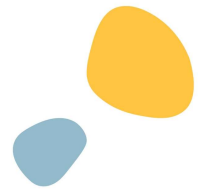
## Q2 Unintentional event

**Question:** True or False?

The meaning of **unintentional event** changed in 13<sup>th</sup> Edition

- A** True, the meaning **changed**
- B** False, the meaning **did not change**

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## Q2 Unintentional event - Answer

**Question:** True or False?

The meaning of **unintentional event** changed in 13<sup>th</sup> Edition

- A** True,  
the meaning **changed**
- 
- ☒ **B** False,  
the meaning **did not change**
- 

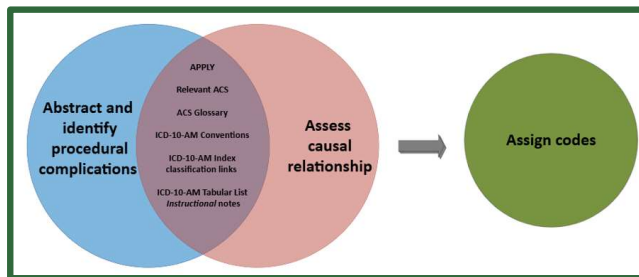
- The wording has been slightly amended, but the core definition of 'unintentional event' in ACS 1904 remains unchanged.
- An unintentional event is an injury or harm caused **during** surgical or medical care and may be identified as an incident **at the time of the intervention or after completion of the intervention.**

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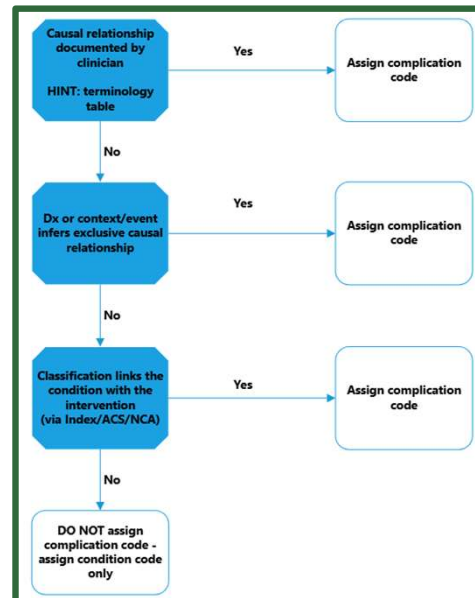
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- The answer is: **B - False, the meaning did not change.**
- Although the wording about unintentional event has slightly changed for ICD-10-AM/ACHI/ACS 13<sup>th</sup> Edition, the core definition of 'unintentional event' has not changed.

# Complications can be complicated!



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- The classification of complications of surgical or medical care can be challenging or one might even say 'complicated!'
- The circle diagram, which also appears in the WACCA 13th Edition Clinical Coding Guidelines on ACS 1904, demonstrates the multiple concepts a Clinical Coder must concurrently understand and consider during both, **one**, documentation abstraction, and **two**, their assessment of a causal relationship between an intervention and a condition. This is before they, **three**, assign codes.
- The flowchart, which we've developed for today's presentation and will add to the above Clinical Coding Guideline, shows the key decisions Clinical Coders must make to decide whether to assign a complication code or not:
  - Has a causal relationship been documented by the clinician?
  - Does the diagnosis or context infer a causal relationship?
  - Does the classification link a condition with an intervention via the Alphabetic Index, an Australian Coding Standard or an IHACPA Coding Rule/National Coding Advice (NCA)?

## Q3 Causal relationship

**Question:** Which of the following is NOT an explicit causal relationship?

- A** Dysphagia **related to** gastric band
- B** Dysphagia **from** gastric band
- C** Dysphagia **secondary to** gastric banding
- D** Dysphagia **caused by** gastric band

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A. Terms indicating cause and effect	B. Terms indicating other (such as time, sequence or concurrence) or unspecified relationships
cause of, caused by (from)	consistent with
from	following, followed
induced by (from)	in context of
leading to	incidental to
owing to	occurred after (in) (during)
precipitated by, precipitating	post, or words with a 'post' prefix (postembryonic)
resulting in (from), resultant, resulted in	previous (to)
secondary to (from) (by)	prior (to)
stem, stemming from	related to
Excerpt of Terminology Table from IHACPA website	

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## Q3 Causal relationship - Answer

**Question:** Which of the following is NOT an explicit causal relationship?

- ☒ **A** Dysphagia **related to** gastric band
- B** Dysphagia **from** gastric band
- C** Dysphagia **secondary to** gastric banding
- D** Dysphagia **caused by** gastric band

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A. Terms indicating cause and effect	B. Terms indicating other (such as time, sequence or concurrence) or unspecified relationships
cause of, caused by (from)	consistent with
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precipitated by, precipitating	post, or words with a 'post' prefix (postembryonic)
resulting in (from), resultant, resulted in	previous (to)
secondary to (from) (by)	prior (to)
stem, stemming from	<u>related to</u>

Excerpt of Terminology Table from IHACPA website

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- The answer is: **A - Dysphagia 'related to' gastric band.**
- For ICD-10-AM/ACHI/ACS 13th Edition, IHACPA have clarified via the Terminology Table, that the terms 'related to' do not necessarily indicate a causal relationship.
- This is because the terms 'related to' may be ambiguous.
- For instance, depending on the context, 'related to' may infer a relationship of time, sequence, coexistence, or cause and effect.
- If the terms 'related' or 'associated' are documented, the Clinical Coder should look for further documentation to evidence a causal relationship.

## Q4 'Due to' pathways



*"Postoperative aspiration pneumonitis"*

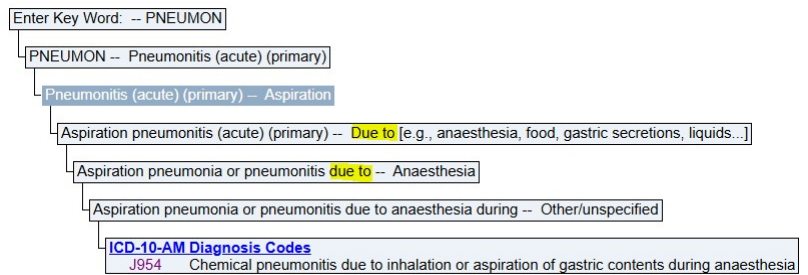
(documented in the postop period after a procedure performed under GA)

### Question: True or False?

The Index/Codefinder pathway shown may be followed.

**A** True, the pathway  
**may** be followed

**B** False, the pathway  
**may not** be followed



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## Q4 'Due to' pathways - Answer



*"Postoperative aspiration pneumonitis"*

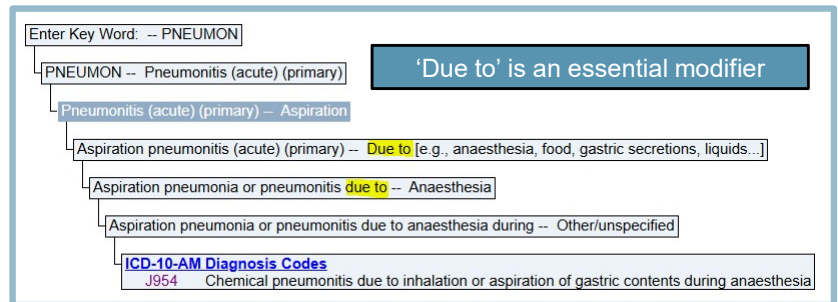
(documented in the postop period after a procedure performed under GA)

### Question: True or False?

The Index/Codefinder pathway shown may be followed.

**A** True, the pathway **may** be followed

☒ **B** False, the pathway **may not** be followed



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- The correct answer is: **B - False, the pathway may not be followed.**
- The pathway shown here includes the term 'due to' as an essential modifier.
  - This means Clinical Coders need to establish a causal relationship, per Convention 9.5.3, to be able to follow this pathway.

## Q5 Wound ooze

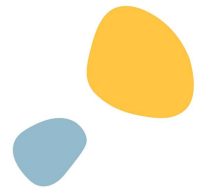
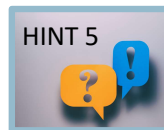


*“Wound ooze – withhold Clexane” (surgical wound)*

**Question:** True or False?

T81.89 *Other complications of a procedure, NEC* is assigned, even though an explicit causal relationship isn’t stated by the clinician.

- A** True, T81.89 **is** assigned
- B** False, T81.89 **is not** assigned



## Q5 Wound ooze - Answer



“Wound ooze – withhold Clexane” (surgical wound)

**Question:** True or False?

T81.89 *Other complications of a procedure, NEC* is assigned, even though an explicit causal relationship isn’t stated by the clinician.

- ✓ **A True, T81.89 is assigned**
- 
- B False, T81.89 is not assigned**
- 

9.5.3 A causation relationship is clearly established where:

- the causal relationship is stated by the clinician **or**
- the clinical diagnosis or context/event clearly infers an exclusive causation relationship (that is the complication would not have occurred in the absence of the causing condition or external causes such as an intervention complication) (see Examples 42–45) **or**
- the classification links two concepts by the Alphabetic Index (see *Conventions: used in the ICD-10-AM Alphabetic Index/10. Special Terminology*), an Australian Coding Standard or by National Coding Advice.

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- The answer is: **A - T81.89 Other complications of a procedure, not elsewhere classified is assigned.**
- Clexane was withheld which means wound ooze meets ACS 0002 *Additional diagnosis* criteria for coding.
- Per Convention 9.5.3, a causal relationship is established when the diagnosis clearly infers an exclusive causation relationship. In this instance, the surgical wound ooze would not have occurred in the absence of the surgery. Therefore, we can assign T81.89 *Other complications of a procedure, not elsewhere classified* for this documentation.



## PROGRESS NOTES

**General surgery Ward Round**

27/07/25

**Active issues:**

# Acute appendicitis  
lap appendectomy 25/07

# postoperative ileus  
slow titration of diet  
ongoing monitoring of fluids/electrolytes

**Imp:**

Clinically stable day 2 post appendectomy

**Plan:**

Ongoing upgrading of diet over next few days

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## Q6 Ileus

**Question:** Which diagnosis code(s) are assigned?

- A** K35.8 Acute appendicitis, other and unspecified  
K56.7 Ileus, unspecified
- 
- B** K35.8 Acute appendicitis, other and unspecified
- 
- C** K35.8 Acute appendicitis, other and unspecified  
T81.87 Digestive system complications due to a procedure, NEC  
K56.7 Ileus, unspecified  
External cause codes

HINT 6



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## PROGRESS NOTES

**General surgery Ward Round**

27/07/25

**Active issues:**# Acute appendicitis  
lap appendicectomy 25/07# postoperative ileus  
slow titration of diet  
ongoing monitoring of fluids/electrolytes**Imp:**

Clinically stable day 2 post appendicectomy

**Plan:**

Ongoing upgrading of diet over next few days

## Q6 Ileus - Answer

**Question:** Which diagnosis code(s) are assigned?

- ☒ **A** K35.8 Acute appendicitis, other and unspecified  
K56.7 Ileus, unspecified
- 
- B** K35.8 Acute appendicitis, other and unspecified
- 
- C** K35.8 Acute appendicitis, other and unspecified  
T81.87 Digestive system complications due to a procedure, NEC  
K56.7 Ileus, unspecified  
External cause codes

9.5.4 Where the cause of a condition is multifactorial or ambiguous, a causal relationship cannot be assumed. Where there is no explicit causal link stated or provided by the Alphabetic Index, look for supplementary wording or other information to provide contextual clarification (see Example 46).

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- The answer is: **A – K35.8 Acute appendicitis, other and unspecified and K56.7 Ileus, unspecified.**
- Ileus was managed by slow titration of diet and ongoing monitoring of fluids and electrolytes, which means ileus meets ACS 0002 *Additional diagnosis* criteria for coding.
- The clinician has used the term 'postoperative', which is not a term inferring a cause-and-effect relationship.
- The Index pathway doesn't list ileus as a condition where a causal link is assumed.
- Ileus is also a medical condition which may have a multifactorial aetiology.
- A causal relationship between the ileus and appendicectomy is not established, so the correct answer for this question is: A - appendicitis and ileus.

# Codefinder pathway for ileus

**Complication(s)** (due to surgical or medical care) (from) (of)  
 ...  
 - digestive — see also *Complication(s)/by site and type*  
 ...  
 - - due to  
 - - - accidental puncture and laceration K91.64  
 - - - intervention NEC T81.87  
 - - retained cholelithiasis (postcholecystectomy) K91.7

Enter Key Word -- COMPL  
 COMPL -- Complication(s) (due to surgical or medical care) (from) (of)  
 Complication(s) (due to surgical or medical care) (from) (of) -- Procedure (surgical or medical care) [coded as complication(s), by site and type]  
 Complication(s) (from) (of), by site and type -- **Body system**  
 Complication(s) (from) (of), by site and type, body system -- **Digestive [biliary]**  
 Digestive complication(s) [biliary] -- **Due to** [e.g., accidental puncture and laceration, intervention NEC]  
 Digestive complication(s) due to -- **Intervention NEC**  
 Use additional code (Chapter 1-18) - to identify condition -- **SPELL** other condition [e.g., cellulitis]  
 Enter Key Word -- ILE  
 ILE -- **Ileus** (bowel) (colon) (inhibitory) (intestine)  
 Ileus (bowel) (colon) (inhibitory) (intestine) -- Other/unspecified  
 External cause of injury of medical or surgical care -- No, not required or external cause already coded  
 ICD-10-AM Diagnosis Codes  
 T81.87 Digestive system complications due to a procedure, not elsewhere classified  
 K56.7 Ileus, unspecified

## Digestive complication(s) [biliary]

- ☐ 1. Bile leak
- ☐ 2. Calculi (gallstones), retained
- ☒ 3. Device, implant or graft (gastric band) (oesophageal antireflux device)
- ☒ 4. Due to [e.g., accidental puncture and laceration, intervention NEC]
- ☐ 5. Retained cholelithiasis (postcholecystectomy)
- ☒ 6. Other/unspecified [coded as complication(s), by site and type]

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- For question 6, ileus couldn't be coded as a complication. However, if it was to be coded as a complication, this slide shows the Codefinder pathway that will take you to the correct complication code.
- Per the Index at the top of the slide, the correct complication code is T81.87 *Digestive system complications due to a procedure, not elsewhere classified*.
- Tips to arrive at this code using Codefinder:
  - If you choose option 6, thinking that you will be able to spell ileus in the next screen, this pathway will give you the code T81.89 *Other complications of a procedure, not elsewhere classified*, instead of T81.87.
  - To get to T81.87, option 4 ("due to intervention NEC") needs to be chosen in Codefinder.
  - The same applies to other digestive system complication conditions classifiable to T81.87, not just ileus.

## Q7 Hypotension



### PROGRESS NOTES

#### Orthopaedics Ward Round

Day 1 post ORIF # shaft tibia

Pain well controlled

SBP low readings overnight

Nil dizziness or light-headedness

#### Imp:

Wound C+D

Haemodynamically stable, resolved hypotension

#### Plan:

AH input with thanks

Encourage PO fluids

**Question:** Which diagnosis code(s) are assigned?

**A** S82.28 Other fracture of shaft of tibia  
External cause codes  
I95.9 Hypotension, unspecified

**B** S82.28 Other fracture of shaft of tibia  
External cause codes  
T81.7 Circulatory system complications due to a procedure, NEC  
I95.9 Hypotension, unspecified  
External cause codes

**C** S82.28 Other fracture of shaft of tibia  
External cause codes

HINT 7



# Q7 Hypotension - Answer



## PROGRESS NOTES

### Orthopaedics Ward Round

Day 1 post ORIF # shaft tibia

Pain well controlled

SBP low readings overnight

Nil dizziness or light-headedness

### Imp:

Wound C+D

Haemodynamically stable, resolved hypotension

### Plan:

AH input with thanks

Encourage PO fluids

## ACS GLOSSARY

### Routine care

Routine care is the services provided to a patient to support logistical, welfare, personal and health care requirements that do not require a care plan.

Routine care may vary according to the services provided by the health facility, and should be considered in the context of the health service providing the care.

For example, routine care may include:

- administering ordered medication
- meal services
- personal hygiene
- assisting patients to complete other daily self care activities
- preventative health care eg turning patients in bed
- taking of vital signs and observations
- provision of equipment to enable the above care
- recording of pre-existing conditions and statuses.

**Question:** Which diagnosis code(s) are assigned?

**A** S82.28 Other fracture of shaft of tibia  
External cause codes  
I95.9 Hypotension, unspecified

**B** S82.28 Other fracture of shaft of tibia  
External cause codes  
T81.7 Circulatory system complications due to a procedure, NEC  
I95.9 Hypotension, unspecified  
External cause codes

☒ **C** S82.28 Other fracture of shaft of tibia  
External cause codes

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- The answer is: **C – S82.28 Other fracture of shaft of tibia plus External Cause codes.**
- Hypotension does not meet ACS 0002 *Additional diagnosis* criteria for coding, because consumption of oral fluids is considered routine in nature, and blood pressure monitoring is also routine care.
- There was no escalation of care by nursing staff overnight for the patient's low blood pressure (BP) readings. Therefore, hypotension is not coded at all for this scenario.

## Q8 Cerebral infarction



Patient experienced right-sided weakness and slurred speech after coiling of an anterior communicating artery (cerebral) aneurysm. Imaging was performed for ?stroke and confirmed cerebral infarction due to thrombosis of the anterior cerebral artery.

**Question:** Which diagnosis code(s) are assigned?

- |          |   |
|----------|---|
| <b>A</b> | I67.1 Cerebral aneurysm, nonruptured<br>I97.89 Other intraoperative and postprocedural disorders of circulatory system, NEC<br>I63.3 Cerebral infarction due to thrombosis of cerebral arteries |
| <b>B</b> | I67.1 Cerebral aneurysm, nonruptured<br>I63.3 Cerebral infarction due to thrombosis of cerebral arteries  |
| <b>C</b> | I67.1 Cerebral aneurysm, nonruptured<br>T81.7 Circulatory system complications due to a procedure, NEC<br>I63.3 Cerebral infarction due to thrombosis of cerebral arteries                      |

HINT 8



## Q8 Cerebral infarction - Answer



Patient experienced right-sided weakness and slurred speech after coiling of an anterior communicating artery (cerebral) aneurysm. Imaging was performed for ?stroke and confirmed cerebral infarction due to thrombosis of the anterior cerebral artery.

9.5.4 Where the cause of a condition is multifactorial or ambiguous, a causal relationship cannot be assumed. Where there is no explicit causal link stated or provided by the Alphabetic Index, look for supplementary wording or other information to provide contextual clarification (see Example 46).

**Question:** Which diagnosis code(s) are assigned?

- |          |                          |  |
|----------|--------------------------|--|
| <b>A</b> | I67.1<br>I97.89<br>I63.3 | Cerebral aneurysm, nonruptured<br>Other intraoperative and postprocedural disorders of circulatory system, NEC<br>Cerebral infarction due to thrombosis of cerebral arteries |
| <hr/>    |                          |  |
| <b>B</b> | I67.1<br>I63.3           | Cerebral aneurysm, nonruptured<br>Cerebral infarction due to thrombosis of cerebral arteries   |
| <hr/>    |                          |  |
| <b>C</b> | I67.1<br>T81.7<br>I63.3  | Cerebral aneurysm, nonruptured<br>Circulatory system complications due to a procedure, NEC<br>Cerebral infarction due to thrombosis of cerebral arteries                     |

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- The answer is: **B – I67.1 Cerebral aneurysm, nonruptured and I63.3 Cerebral infarction due to thrombosis of cerebral arteries.**
- Option A is not a valid option as I97.89 *Other intraoperative and postprocedural disorders of circulatory system, NEC* has been inactivated in ICD-10-AM 13th Edition and mapped to T81.7 *Circulatory system complications due to a procedure, NEC*. So that leaves us with option B or C as the correct answer.
- Imaging was performed specifically to investigate right-sided weakness and slurred speech, so ACS 0002 *Additional diagnoses* is applicable to code cerebral infarct.
- The classification does not link stroke or cerebral infarction with coiling of an aneurysm.

- There is also no causal relationship documented by the clinician. The term 'after' infers a temporal relationship, not a causal relationship.
- Additionally, stroke is a medical condition which may have multifactorial aetiology; therefore, a causal link cannot be assumed.
- As a causal relationship could not be established between the stroke and the aneurysm coiling, the correct answer is **B - we code the infarction as a condition in its own right, not as a complication.**

# Perforation from a device

- New Alphabetic Index entries have been created at: **Complication(s)/perforation from**

**Complication(s)** (due to surgical or medical care) (from) (of)

- perforation from

- - accidental puncture (unintentional event) — see *Complication(s)/accidental puncture or laceration during procedure/by site*

- - device, implant or graft (in situ) — see *Complication(s)/mechanical, of device, implant or graft/by site*

- perfusion NEC T80.9

- At all mechanical complication codes, the *Includes* note for perforation has been expanded

*Includes:* breakdown (mechanical)  
displacement (migration)  
leakage  
loosening  
malposition  
mechanical obstruction  
perforation (other than accidental puncture or laceration during a procedure)  
protrusion

*Use additional code (Chapter 1–18) to identify condition resulting from mechanical complication.*

If the device causes perforation  
DURING a procedure, this is an  
**unintentional event,**  
**NOT a mechanical complication**

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- The next topic is perforation from a device.
- The box at the top of the slide shows some new Index entries created in ICD-10-AM 13th Edition. These new entries include perforation from **accidental puncture**; and perforation from **device**.
- The box at the bottom of the slide shows the *Includes* notes at each mechanical complication code in the ICD-10-AM Tabular List of Diseases. Here, the *Includes* note for perforation has been expanded to show that perforation is a mechanical complication of a device, unless the perforation occurs **during** a procedure.

## Q9 Perforation from a device



### Patient 1

Admission for diagnostic hysteroscopy and insertion of intrauterine device (IUD). The IUD perforated the uterus during the insertion.

### Patient 2

Admission for laparoscopy for migrated IUD seen on imaging. Laparoscopy confirmed perforation of posterior uterine wall by IUD.

**Question:** Which complication code is assigned for each patient?

- A** Patient 1: N99.66 Accidental puncture and laceration of uterus during a procedure  
Patient 2: T83.3 Mechanical complication of intrauterine device
- B** Patient 1: T83.3 Mechanical complication of intrauterine device  
Patient 2: T83.3 Mechanical complication of intrauterine device

HINT 9



## Q9 Perforation from a device - Answer



### Patient 1

Admission for diagnostic hysteroscopy and insertion of intrauterine device (IUD). The IUD perforated the uterus during the insertion.

### Patient 2

Admission for laparoscopy for migrated IUD seen on imaging. Laparoscopy confirmed perforation of posterior uterine wall by IUD.

**Question:** Which complication code is assigned for each patient?



- A**    **Patient 1:** N99.66 Accidental puncture and laceration of uterus during a procedure  
**Patient 2:** T83.3 Mechanical complication of intrauterine device
- 
- B**    **Patient 1:** T83.3 Mechanical complication of intrauterine device  
**Patient 2:** T83.3 Mechanical complication of intrauterine device

- **Patient 1:** during the procedure = unintentional event  
**Patient 2:** no indication that it occurred during the procedure = mechanical complication
- The cause of many IUD perforations is the device being forced into, or through, the uterine wall during insertion, with subsequent gradual erosion i.e. unintentional event (link to journal article: [Intrauterine devices and risk of uterine perforation: current perspectives](#)). However, a blanket assumption can't be made; instead coders must be guided by the documentation.

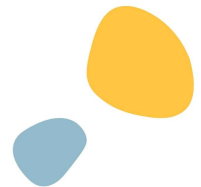
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- The Answer is: **A**.
  - In Patient 1, the perforation occurred during a procedure, so it's an unintentional event (N99.66).
  - In Patient 2, the documentation doesn't actually tell us when the perforation occurred, so it's coded as a mechanical complication (T83.3).
- Some clinical background which might be of interest to you, is that many IUD perforations are thought to be caused by the device inadvertently going into the uterine wall during insertion, without the operator realising at the time.
- However, we can't assume every IUD perforation is an unintentional event, just based on the literature. Instead, Clinical Coders must be guided by the documentation.

## Collection (without further specification)

- A 'collection' is an abnormal build-up of fluid within the body
- May consist of various contents such as blood, pus, serous fluid etc.
- A 'collection' is a sign of another condition. For example, it may be a sign of:
  - An inflammatory condition (e.g. pelvic inflammatory disease)
  - Malignancy
  - Infection
  - Haematoma
  - Seroma
- 'Collection' without further specification warrants generation of a coding query.

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- The next topic is collection.
- A 'collection' is an abnormal fluid build-up in the body. It may consist of various contents such as blood, pus, and serous fluid.
- 'Collection' is not a condition per se. It's a sign of another condition such as infection or haematoma.
- 'Collection' without further specification warrants generation of a clinical coding query.
- The next couple of questions are about collections.

## Q10 Postop collection



Repair (without mesh) of abdominal wall hernia 9 days ago, presenting with increasing pain last 2 days. USS shows collection in the surgical bed with volume of 50cc, likely seroma. "Aspiration of seroma" performed.

**Question:** Which of the following statements is correct?

- A** The classification links the concepts 'seroma/haematoma' & 'surgical wound'.  
**Assign T81.0 Haemorrhage and haematoma complicating a procedure, NEC**
- B** The clinical diagnosis or context/event clearly infers an exclusive causation relationship; plus the classification links the concepts 'seroma/haematoma' & 'surgical wound'.  
**Assign T81.0 Haemorrhage and haematoma complicating a procedure, NEC**
- C** There's inadequate documentation for the collection to be coded as a complication.  
**Assign R19.89 Other specified symptoms and signs involving the digestive system and abdomen**

HINT 10



## Q10 Postop collection - Answer



Repair (without mesh) of abdominal wall hernia 9 days ago, presenting with increasing pain last 2 days. USS shows collection in the surgical bed with volume of 50cc, likely seroma. "Aspiration of seroma" performed.

**Question:** Which of the following statements is correct?

**A** The classification links the concepts 'seroma/haematoma' & 'surgical wound'.

**Assign T81.0 Haemorrhage and haematoma complicating a procedure, NEC**



**B** The clinical diagnosis or context/event clearly infers an exclusive causation relationship; plus the classification links the concepts 'seroma/haematoma' & 'surgical wound'.

**Assign T81.0 Haemorrhage and haematoma complicating a procedure, NEC**

**C** There's inadequate documentation for the collection to be coded as a complication.

**Assign R19.89 Other specified symptoms and signs involving the digestive system and abdomen**

9.5.3 A causation relationship is clearly established where:

- the causal relationship is stated by the clinician or
- the clinical diagnosis or context/event clearly infers an **exclusive causation relationship** (that is the complication would not have occurred in the absence of the causing condition or external causes such as an intervention complication) (see Examples 42-45) or
- the classification links two concepts by the **Alphabetic Index** (see *Conventions used in the ICD-10-AM Alphabetic Index/10. Special Terminology*), an Australian Coding Standard or by National Coding Advice.

Complication(s) (due to surgical or medical care) (from) (of)

- haemorrhage or haematoma NEC T81.0
- access site for percutaneous cardiovascular procedure I97.84
- amputation stump T87.81
- anastomosis site NEC T81.0
- ...
- ventricular intracranial shunt T85.83
- post tonsillectomy T81.0
- surgical (operative) wound T81.0
- tracheostomy J95.01
- urinary tract stoma N99.51

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- The answer is: **B** because two separate parts of Convention 9.5.3 are applicable.
  - The first part of the convention that's applicable is a causal relationship being inferred. This is because without the surgery, there wouldn't have been a surgical wound in which the seroma could develop.
  - The second part of the convention that's applicable, is the Index linking two concepts. As you can see, the Index contains both haematoma and surgical wound in the same pathway, so the classification has made a link.
- It's also important to note that if this had been a mesh repair, AND the documentation indicated the seroma involved mesh, or was at the site of the mesh, it would have instead been coded as haematoma of an implant, rather than T81.0 *Haemorrhage and haematoma complicating a procedure, NEC*.

## Q11 Postop collection



**DMR**

*"Pelvic collection" after vaginal hysterectomy*

**Question:** Which of the following statements is correct?

- A** A causal relationship is stated by the clinician.  
Assign T81.89 Other complications of a procedure, not elsewhere classified
- B** The clinical diagnosis or context/event clearly infers an exclusive causation relationship.  
Assign T81.89 Other complications of a procedure, not elsewhere classified
- C** There's inadequate documentation for the collection to be coded as a complication.  
Assign R19.89 Other specified symptoms and signs involving the digestive system and abdomen

HINT 11



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# Q11 Postop collection - Answer



DMR

Pelvic collection after vaginal hysterectomy

**Question:** Which of the following statements is correct?

- A** A causal relationship is stated by the clinician.  
Assign T81.89 Other complications of a procedure, NEC

---

- B** The clinical diagnosis or context/event clearly infers an exclusive causation relationship.  
Assign T81.89 Other complications of a procedure, NEC

---

- ☒ **C** There's inadequate documentation for the collection to be coded as a complication.  
Assign R19.89 Other specified symptoms and signs involving the digestive system and abdomen

9.5.2 Connecting terms such as 'following', 'post' or 'after' (written or implied by similar terms) infer a temporal relationship (relating to time) or sequence of events, or co-occurrence of concepts (see Example 42).  
Relationship terms such as 'associated with', 'postprocedural' or 'related' (written or implied by similar terms) are ambiguous and depending on the context may infer a relationship relating to timing, sequence of events, coexistence or cause and effect.

9.5.3 A causation relationship is clearly established where:

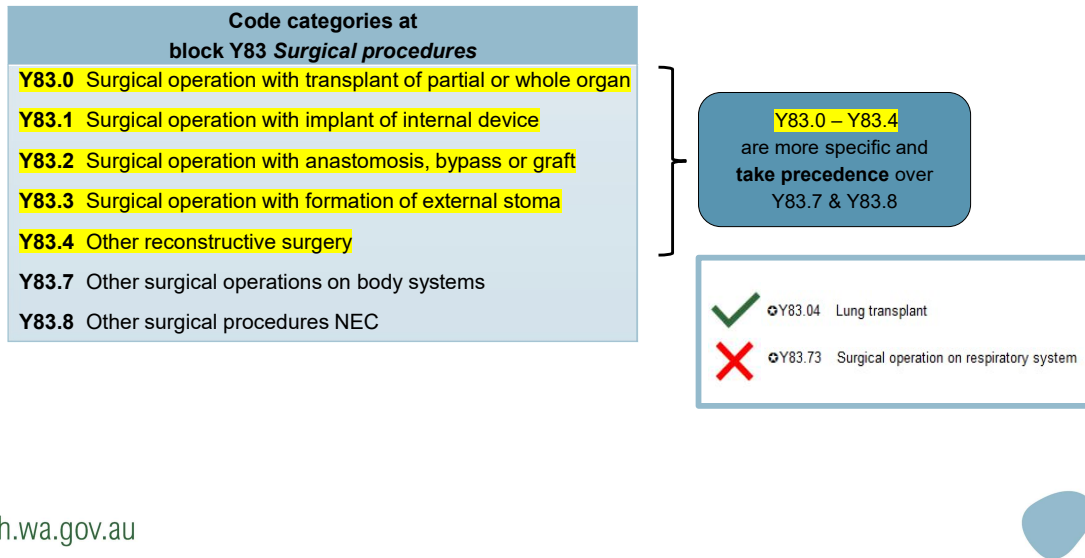
- the causal relationship is stated by the clinician or
- the clinical diagnosis or context/event clearly infers an exclusive causation relationship (that is the complication would not have occurred in the absence of the causing condition or external causes such as an intervention complication) (see Examples 42-45) or
- the classification links two concepts by the Alphabetic Index (see *Conventions used in the ICD-10-AM Alphabetic Index 10. Special Terminology*), an Australian Coding Standard or by National Coding Advice.

9.5.4 Where the cause of a condition is multifactorial or ambiguous, a causal relationship cannot be assumed. Where there is no explicit causal link stated or provided by the Alphabetic Index, look for supplementary wording or other information to provide contextual clarification (see Example 46).

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- The Answer is C.
- There's no documented causal relationship; and there's no documentation to indicate where the collection is located in relation to the surgical wound.
- We also don't know whether the collection is an abscess, haematoma, or another condition.
- In the absence of clinician clarification, the documentation is ambiguous and a symptom code is assigned via the Index pathway: **Symptoms**/involving/pelvis.

# External cause code - surgical



- The large box in the middle of the slide lists all code categories at block Y83 *Surgical procedures*.
- The yellow highlighted categories, like for transplant, are more specific categories and take precedence over Y83.7 and Y83.8, which are residual categories.
- For example, if the external cause is a lung transplant, codes from Y83.0 are more specific and take precedence over codes from Y83.7 for operations on the respiratory system.

# External cause code - surgical

<b>Y83.7 Other surgical operations on body systems</b>	
<i>Includes:</i> open: • biopsy • tissue sampling or repair surgical evacuation of fluid collection	
Y83.71	Surgical operation on nervous system
Y83.72	Surgical operation on endocrine system
Y83.73	Surgical operation on respiratory system
Y83.74	Surgical operation on cardiovascular system
Y83.75	Surgical operation on digestive system
Y83.76	Surgical operation on urinary system
Y83.77	Surgical operation on male genital system
Y83.78	Surgical operation on musculoskeletal system
<b>Y83.8 Other surgical procedures, not elsewhere classified</b>	
<i>Includes:</i> open: • biopsy • tissue sampling or repair surgical evacuation of fluid collection	
<i>Excludes:</i> amputation of limb(s) (Y83.5)	
Y83.81	Surgical procedure on eye and adnexa
Y83.82	Surgical procedure on ear and mastoid process
Y83.83	Surgical procedure on nose, mouth and pharynx
Y83.84	Surgical procedure, dental
Y83.85	Surgical procedure on blood and blood-forming organs
Y83.86	Surgical procedure, gynaecological
Y83.87	Surgical procedure, obstetric
Y83.88	Surgical procedure on breast
Y83.89	Other surgical procedure Skin or integument procedure
Y83.9	Surgical procedure, unspecified

**Y83.7 & Y83.8  
body system  
codes reflect the  
ACHI Tabular List  
body chapter**

## Code categories at block Y83 Surgical procedures

**Y83.0 Surgical operation with transplant of partial or whole organ**

**Y83.1 Surgical operation with implant of internal device**

**Y83.2 Surgical operation with anastomosis, bypass or graft**

**Y83.3 Surgical operation with formation of external stoma**

**Y83.4 Other reconstructive surgery**

**Y83.7 Other surgical operations on body systems**

**Y83.8 Other surgical procedures NEC**

- For those residual categories Y83.7 and Y83.8, the body system code that's assigned should reflect the ACHI body chapter where the original procedure is classified.
- For example, thyroidectomy is classified to the Endocrine chapter in ACHI, so we would assign Y83.72 *Surgical operation on endocrine system*.

# External cause code - medical

<b>Y84.0</b>	<b>Medical procedures on cardiovascular system</b> <b>CR</b>
Y84.01	Cardiac catheterisation and coronary angiography
Y84.09	Medical procedure on cardiovascular system, not elsewhere classified Catheter based cardiac and vascular intervention without implant of device
Y84.1	Kidney dialysis <b>CR</b>
Y84.2	Radiological procedure and radiotherapy <b>CR</b>
<b>Y84.3</b>	<b>Medical procedures on nervous system</b>
Y84.31	Shock therapy
Y84.39	Medical procedure on nervous system, not elsewhere classified
Y84.4	Aspiration and drainage of body cavity or fluid collection
	Drainage of fluid collection (catheter) Joint aspiration Paracentesis Thoracentesis <i>Excludes:</i> surgical evacuation of fluid collection (Y83.8)
<b>Y84.5</b>	<b>Medical procedures on digestive system</b>
Y84.51	Insertion of gastric and duodenal sound
Y84.59	Medical procedure on digestive system, not elsewhere classified
<b>Y84.6</b>	<b>Medical procedures on genitourinary system</b> <b>CR</b>
Y84.61	Urinary catheterisation
Y84.69	Medical procedure on genitourinary system, not elsewhere classified
<b>Y84.7</b>	<b>Medical procedures on blood and blood-forming organs</b>
Y84.71	Blood specimen sampling [collection]
	<i>Includes:</i> sampling [collection]: • arterial • fingerstick • venepuncture
Y84.79	Medical procedure on blood and blood-forming organs, not elsewhere classified

The highlighted codes are more specific and take precedence over body system codes

For body system codes, the code should reflect the ACHI Tabular List body chapter to which the original procedure is classified.

<b>Y84.8</b>	<b>Other medical procedures, not elsewhere classified</b> <b>CR CR CR CR CR</b>
Y84.81	Medical procedure on endocrine system, not elsewhere classified
Y84.82	Medical procedure on eye and adnexa, not elsewhere classified
Y84.83	Medical procedure on ear and mastoid process, not elsewhere classified
Y84.84	Medical procedure on nose, mouth [dental] and pharynx, not elsewhere classified
Y84.85	Medical procedure for respiratory system, not elsewhere classified
Y84.86	Medical procedure on breast and gynaecological system, not elsewhere classified
Y84.87	Medical procedure for obstetrics, not elsewhere classified
Y84.88	Medical procedure on musculoskeletal system, not elsewhere classified
Y84.89	Other medical procedure
Y84.9	Medical procedure, unspecified <b>CR</b>

- The same logic applies for medical procedures.
- The yellow highlighted codes are more specific and take precedence over the residual body system codes.

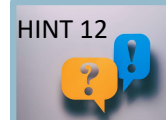
## Q12 External cause




*"Displaced breast saline implant"*

**Question:** Which external cause code is assigned?

- A** T85.4 Mechanical complication of breast implants  
Y83.88 Surgical procedure on breast
- B** T85.4 Mechanical complication of breast implants  
Y83.18 Surgical operation with implant of plastic surgery internal device



## Q12 External cause - Answer

 **DMR** *"Displaced breast saline implant"*

**Question:** Which external cause code is assigned?

**A** T85.4 Mechanical complication of breast implants  
Y83.88 Surgical procedure on breast

☒ **B** T85.4 Mechanical complication of breast implants  
Y83.18 Surgical operation with implant of plastic surgery internal device

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- The Answer is: **B** because Y83.18 is a more specific code and takes precedence over the residual body system code.



**Principal diagnosis:** Brain ventricular shunt infection  
**Interventions performed this visit:** VP shunt externalisation, temporary external ventricular drain; re-insertion VP shunt.

**01/07/2025**  
**Progress Notes**

**HxPC**

- 3yo with abdo pain and fevers  
 - PU, BO  
 - reduced oral intake

**PMHx**

Complex cerebral malformation -Ventriculoperitoneal shunt inserted June 2025

**Ix**

USS

**FINDINGS:**

Within the left upper quadrant adjacent to the spleen there is a 7 x 27 x 7mm complex fluid focus suspicious for infective collection. VP shunt is seen within the vicinity. Normal appearance of the liver, there is periportal oedema. Normal size, shape and corticomedullary differentiation kidneys. Normal appearance of the spleen which measures 66 mm. Unremarkable appearance of the infantile uterus and ovaries with Doppler flow demonstrated.

**CONCLUSION:**

Left upper quadrant complex fluid collection measuring 27 mm in maximal dimension.

**Imp:**

Collection in vicinity of VP shunt

**Plan:**

OT today for shunt externalisation  
 Commence IV Cefepime and Metronidazole

**02/07/2025**

**Progress Notes**

Day 1 post externalisation of VP shunt

# Complex cerebral malformation

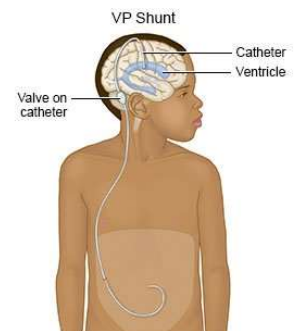
- Informed by micro regarding the finding of gram positive cocci in CSF sample sent off post op.  
 - On IV Cefepime and Metronidazole.  
 - This was discussed with neurosurgical registrar Dr X. Advised that current IV antibiotics will cover this.

## Q13 VP shunt

### Question:

Assign diagnosis and external cause codes for this documentation

HINT 13



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Specimen:-  
 Appearance - CSF  
 CSF Colour  
 Leucocyte count  
 ... Neutrophils  
 ... Mononuclear  
 Erythrocyte Count  
 Microscopy  
 Gram positive cocci: Many  
 Culture  
 Abundant growth of Staphylococcus epidermidis (STAEPI)

- A ventriculoperitoneal (VP) shunt diverts excess fluid from the brain to the peritoneum, where it can be absorbed by the body.
- For this question, there are excerpts from the discharge summary and progress notes plus a microbiology report.
- Other documentation, like operation reports, have not been included.
- All documentation on the slide can also be found in your booklet.
- For this question, please assign diagnosis and external cause codes for the documentation provided.



**Principal diagnosis:** Brain ventricular shunt infection  
**Interventions performed this visit:** VP shunt externalisation, temporary external ventricular drain; re-insertion VP shunt.

01/07/2025

**Progress Notes****HxPC**

- 3yo with abdo pain and fevers  
 - PU, BO  
 - reduced oral intake

**PMHx**

Complex cerebral malformation - Ventriculoperitoneal shunt inserted June 2025

**Ix**

USS

**FINDINGS:**

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Normal appearance of the liver, there is periportal oedema. Normal size, shape and corticomedullary differentiation kidneys. Normal appearance of the spleen which measures 66 mm. Unremarkable appearance of the infantile uterus and ovaries with Doppler flow demonstrated.

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 Commence IV Cefepime and Metronidazole

02/07/2025

**Progress Notes**

Day 1 post externalisation of VP shunt

# Complex cerebral malformation

- Informed by micro regarding the finding of gram positive cocci in CSF sample sent off post op.  
 - On IV Cefepime and Metronidazole.  
 - This was discussed with neurosurgical registrar Dr X. Advised that current IV antibiotics will cover this.

## Q13 VP shunt - Answer

**Question:** Assign diagnosis and external cause codes for this documentation

<b>T85.72</b>	Infection and inflammatory reaction due to internal nervous system devices, implants and grafts
<b>B95.79</b>	Other <i>Staphylococcus</i> as the cause of diseases classified to other chapters
<b>Y83.14</b>	Surgical operation with implant of neurological internal device
<b>Y92.23</b>	Health service area, not specified as this facility
<b>U73.89</b>	Other specified activity, NEC
<b>Q04.9</b>	Congenital malformation of brain, unspecified

Specimen-	
Appearance- CSF	
CSF Colour	
Leucocyte count	
... Neutrophils	
... Mononuclear	
Erythrocyte Count	
Microscopy	
Gram positive cocci: Many	
Culture	
Abundant growth of <i>Staphylococcus epidermidis</i> (STAEPI)	

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- After study, the collection was diagnosed as an INFECTION, so the collection isn't coded separately because it's inherent in the infection code.
- Although the collection itself is localised inside the abdomen, the infection is more widespread as evidenced by the cerebrospinal fluid microbiology, PLUS the final diagnosis is 'brain ventricular shunt infection'.
- A VP shunt spans multiple body systems because it's located in the nervous system but also the abdomen. However, a VP shunt is a nervous system device, and so the code assigned is T85.72 *Infection due to nervous system device*. The corresponding external cause code is Y83.14 *Implant of neurological device*.
- There is also a code assigned for the bacterial agent, Staph epidermidis, and a code for cerebral malformation because it received surgical intervention during the episode.

# Thank you!

## Questions?



See WACCA website for 13<sup>th</sup> Edition Guidelines on:

- ACS 1904 *Complications of surgical or medical care*
- ACS 1924 *Difficult intubation*
- Miscellaneous changes

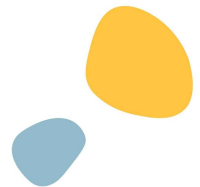
WACCA 13<sup>th</sup> Edition Guidelines **coming soon**:

- ICD-10-AM code changes
- ACHI code changes

IHACPA **coming soon**:

- Additional education
- FAQ responses

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