Single Ventricle Case Studies

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I have nothing to disclose
CASE STUDY #1

• Full term baby boy born with prenatally diagnosed HLHS (MA-AA)
• 12/11 Norwood procedure DOL7
• Postop course complicated by heart block requiring permanent pacemaker and chronic lung disease with elevated PVR treated with Bosentan and Sildenafil
• 12/31 Pacemaker placement
• Remained in hospital and had Nissen/GT placed on 4/19
What is your Index Procedure?

a) Norwood  
b) Permanent Pacemaker Placement  
c) Glenn
Poll: What is your Index Procedure?
What is your Index Procedure?

a) Norwood
b) Permanent Pacemaker Placement
c) Glenn

The Norwood is your first CPB Cardiovascular or No-CPB Cardiovascular procedure of the Admission/Episode of Care.
What is the Op Type for the Pacemaker Procedure?

a) CPB Cardiovascular
b) No CPB Cardiovascular
c) Thoracic
d) Minor
Poll: What is the Op Type for the Pacemaker Procedure?
What is the Op Type for the Pacemaker Procedure?

a) CPB Cardiovascular
b) No CPB Cardiovascular
c) Thoracic
d) Minor
CASE STUDY #1 CONT.

- 5/12 Glenn procedure with partial clipping of RV-PA conduit.
- Postop Glenn course complicated by chylous effusion requiring drainage and diet change and E Coli PNA.
- Remained in hospital for weaning of respiratory support, narcotic withdrawal and weight gain
- 8/30 Discharged Home
Glenn – Planned or Unplanned reoperation?

a) Planned cardiac reoperation
b) Unplanned cardiac reoperation
Poll: Glenn - Planned or Unplanned reoperation?
Glenn – Planned or Unplanned reoperation?

a) Planned cardiac reoperation
b) Unplanned cardiac reoperation

Per the v3.41 Training manual:

If a Glenn is performed after a Norwood, it is always a **planned** operation, regardless of whether or not the patient went home between the Norwood and Glenn.
GT placement on 4/19 is coded as a Unplanned non-cardiac reoperation.

a) True
b) False
Poll: GT placement on 4/19 is coded as an Unplanned non-cardiac reoperation.
GT placement on 4/19 is coded as a Unplanned non-cardiac reoperation.

a) True
b) False

Per the v3.41 Training manual:

For the purposes of the database, if the GT is placed following cardiac surgery and was not included in the surgical plan, it is considered an unplanned non-cardiac reoperation.
What is the most accurate way to capture the complication of chylous effusion?

• Chylothorax
• Pleural effusion, requiring drainage
• Chylothorax AND Pleural effusion, requiring draining
• None of the Above
Poll: What is the most accurate way to capture the complication of chylous effusion?
What is the most accurate way to capture the complication of chylous effusion?

- Chylothorax
- Pleural effusion, requiring drainage
- Chylothorax AND Pleural effusion, requiring draining
- None of the Above
CASE STUDY #2

• Term infant (DOB 7/23) with HLHS (MA/AA), very small native aortic arch hypoplasia and mild tricuspid valve regurgitation.

• Preoperative course included culture negative sepsis 7/26 requiring intubation, NEC treated medically, and adrenal insufficiency treated with steroids.

• 8/8 PA Banding

• 8/9 PA Band tightening/adjustment s/p code event

• 8/16 Norwood with RV-PA conduit (Sano shunt)
Which of the following Preoperative Factor would **NOT** be coded:

a) NEC, Treated medically
b) Invasive Mechanical ventilation to treat cardiorespiratory failure

c) Sepsis
d) Currently taking steroids as treatment for adrenal insufficiency
Poll: Which of the following Preoperative Factor would NOT be coded?
Which of the following Preoperative Factor would NOT be coded:

a) NEC, Treated medically
b) Invasive Mechanical ventilation to treat cardiorespiratory failure
c) Sepsis
d) Currently taking steroids as treatment for adrenal insufficiency

You would not code Sepsis because it occurred >48 hours prior to the first surgical procedure and per v3.41 data definitions:
What is the Index Procedure for this Episode of Care?

a) PA Banding
b) PA Band Adjustment
c) Norwood
d) Delayed Sternal Closure
Poll: What is the Index Procedure for this Episode of Care?
What is the Index Procedure for this Episode of Care?

a) PA Banding
b) PA Band Adjustment
c) Norwood
d) Delayed Sternal Closure

July 2019: This is about index procedure determination specifically in reference to a child who has a PA Banding, then goes on for Norwood. Why would the first operation (with lower stat score) be the index procedure, when a Norwood carries a stat 5 score? The PA Banding is the index procedure because it is the first cardiovascular case the patient had. Currently, this is the way rules work. A group of surgeons are looking at updating the rules so this type of thing doesn’t happen.
CASE STUDY #2 CONT.

- 8/21 Delayed sternal closure
- **8/24 Extubated to HFNC**
- 9/14 Reintubated for OR for GT placement
- **9/15 Extubated to HFNC**
- 9/28 Transferred to outside acute care center closer to family home to continue working on feeding weaning O2
- 10/1 Patient was subsequently readmitted to our surgical center for respiratory distress and infectious work-up.
- 10/8 Discharged Home
What is the date of FINAL extubation for all three of the STS encounters?

- 8/24
- 9/15
- 9/28
- 10/8
Poll: What is date of FINAL extubation for all three of the STS encounters?
What is the date of FINAL extubation for all three of the STS encounters?

• 8/24
• 9/15
• 9/28
• 10/8
The complication of “Postoperative/Postprocedural respiratory insufficiency requiring reintubation” would also be captured.

• True
• False
Poll: The complication of “Postoperative/Postprocedural respiratory insufficiency requiring reintubation” would also be captured.
The complication of “Postoperative/Postprocedural respiratory insufficiency requiring reintubation” would also be captured.

• True
• False
What is your date of Database Discharge for this Episode of Care?

- 9/28 (Date of Transfer to outside acute care center)
- 10/1 (Date of readmission to surgical center)
- 10/8 (Date of Discharge Home)
Poll: What is your date of Database Discharge for this Episode of Care?
What is your date of Database Discharge for this Episode of Care?

• 9/28 (Date of Transfer to outside acute care center)
• 10/1 (Date of readmission to surgical center)
• 10/8 (Date of Discharge Home)
QUESTIONS?
THANK YOU!