

# Acute Aortic Syndromes

## REFERRAL PATHWAY THEATRE SOP ACCU CARE PATHWAY

Surname..... First Name.....

Medical Record No. .... NHS Number.....

Date of admission .....

Diagnosis: Type A AD  Type A IMH  Type B AD  Type B IMH

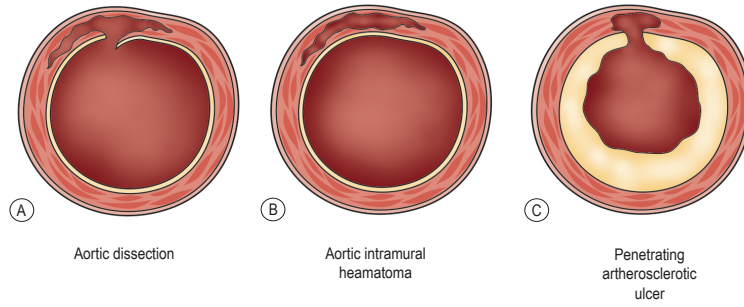
PAU  Impending rupture

Management plan: Conservative

Surgery  .....

Endovascular  .....

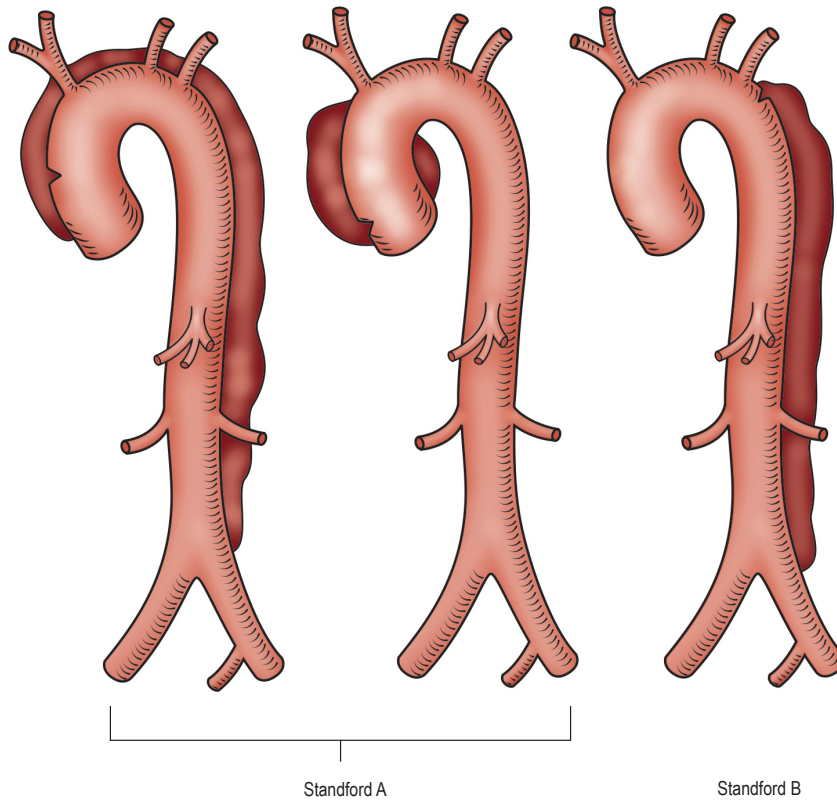
Responsible Consultant .....



De Baakey I

De Baakey II

De Baakey III



**TYPE A AAS**

**Surgical indication**

EMERGENCY SURGERY for:

- AD
- IMH with pericardial effusion

URGENT SURGERY for:

- IMH without effusion
- PAU

**TYPE B AAS**

**Conservative management**

- BP control
- Pain management

**Urgent intervention if:**

- Uncontrolled BP
- Persistent pain
- Malperfusion
- Expanding aortic diameters

TEVAR (preferred in acute setting) vs. Open surgical repair (if no endovascular option)

## Acute Type A Aortic Dissection Referral Pathway

### Cardiac SpR Receives Referral Call:

- Note history, diagnosis, review of imaging (if not on PACS, rapid image transfer), contact details of referring clinician.
- Discuss with oncall Aortic Surgery Consultant

### Cardiac SpR Accept Referral:

- Call referring team and ask for patient to be transferred to Cardiac Theatres, 1st Floor, KGV Building, St Bartholomew's Hospital
- Take patients Name, Date of Birth, NHS Number and Allergies
- IV access, IV labetalol aim SBP <110mmHg, 15min obs

### Cardiac SpR Informs the following:

- Anaesthetic SPOC - 07525 618 514 who will inform Consultant
- Theatre Team + Perfusion via Swithboard
- ICU Bed Coordinator who will also register patient and print name bands
- Cardiac SpR to print blood labels and prepare consent form

Team Brief in Theatre prior to arrival of patient

### On arrival in theatre:

- Rapid assessment by Surgeon and Anaesthetist
- Consent form signed
- Arterial line inserted and bloods immediately drawn
- HCSW to take bloods to lab
- Anaesthesia commenced
- Procedure will start with "emergency blood" until cross match available

**Acute Type A Aortic Dissection Referral Pathway - Checklist**

Patients name:

Date of Birth:

NHS Number:

Allergies:

Referring Clinician Name and Phone:

Hospital:

Date of Referral:    /    /            Time:

Presentation: Chest Pain / Back Pain / Abdo Pain / Malperfusion (limb, abdominal, NRL, coronaries) / Incidental

BP:    /            (Both L and R arms initially and manage higher BP) (On Nil / Labetalol / GTN)

Lactate:            Stroke: Yes / No            Limb Ischaemia: Yes / No            Aortic valve regurgitation: Yes / No

Extent dissection: Root / Ascending / Arch / Descending / Visceral / Iliacs            Dissection / IMH / PAU

Significant Medical History

Images Reviewed: Yes / No    PACS / Whatsapp            Time:

Pericardial effusion: Yes / No

Accepting Aortic Consultant: Oo / Uppal / Yap / Lall / DiSalvo / Adams / Lopez-Marco            Time:

Referring Hospital Informed to send patient to Barts:             Time:

Anaesthetic SPOC informed:

Theatre Team Informed:

ICU Coordinator Informed:

Wristbands printed and taken to theatre:

Bloods labels printed and taken to theatre:

Consent form prepared and taken to theatre:

Team Brief Performed:             Time:

Bloods Taken to Lab:             Time

## Acute Type B Aortic Dissection Referral Pathway

### Cardiac SpR Receives Referral Call:

- Note history, diagnosis, review of imaging (if not on PACS, rapid image transfer), contact details of referring clinician.
- Discuss with oncall Aortic Surgery Consultant
- Discuss with ITU Bed Coordinator

### Cardiac SpR Accepts Referral:

- Call referring team and ask for patient to be transferred to HDU/ITU 1st Floor, KGV Building, St Bartholomew's Hospital
- Take patients Name, Date of Birth, NHS Number and Allergies
- IV access, IV labetalol aim SBP <120mmHg

### On arrival in ITU:

- Assessment by Cardiac SpR
- Ensure analgesia + BP control (sBP < 120 mmHg - Labetalol (neat) +/- GTN if needed)
- Arterial line + CVC line inserted by Anaesthetic team if not present already
- Hourly obs: Cardiovascular, Neuro, Lower limbs, UO. Frequent ABGs

### Conservative management plan:

- Conservative treatment if not complicated
- Repeat CT Aorta 48h after admission
- Request TTE
- Early referral to BP consultant (Dr Melvin Lobo / Dr Vikas Kapil) and next planned Aortic MDT
- Discharge from ITU/HDU once 24h without IV BP medication
- Follow-up in Aortic Clinic with repeated CT scan in 4-6 weeks

### Escalate to Aortic Consultant if complications:

- Refractory pain or uncontrollable BP
- Signs of malperfusion and/or ischaemia
- Rapid aortic expansion
- For Ad-Hoc MDT discussion +/- Urgent/Emergency intervention (Endovascular or Open Surgery)
- Prepare Cross match, Consent Form and inform relevant teams

**Acute Aortic Syndromes Emergency Admission Pathway**

**Common admission guidelines to HDU/ITU**

Invasive monitoring	<ul style="list-style-type: none"> <li>• Central line</li> <li>• Arterial line</li> <li>• Urinary catheter with temperature monitoring</li> <li>• PA sheath +/- PA catheter (if indicated)</li> <li>• ECG</li> </ul>
Investigations on admission	<p>Infection control</p> <ul style="list-style-type: none"> <li>• MRSA screen</li> <li>• CRO screen</li> <li>• COVID19 screen</li> <li>• Urinalysis</li> <li>• Send sputum, urine, faeces for MC&amp;S if clinically indicated</li> </ul> <p>Blood tests</p> <ul style="list-style-type: none"> <li>• FBC, U&amp;E, Coagulation, X-match, hourly ABGs</li> </ul> <p>Imaging</p> <ul style="list-style-type: none"> <li>• Chest x-ray</li> <li>• CT aorta</li> <li>• TTE</li> </ul> <p>12 lead ECG</p>
Observations	<p>Usual level 2/3 clinical observations</p> <ul style="list-style-type: none"> <li>- Escalate if changes in BP</li> <li>- New chest/back/abdominal pain</li> <li>- New neurological or vascular symptoms</li> <li>- Deterioration in UO, ABGs</li> </ul> <p>Hourly neurovascular observations – potential lower limb ischemia or paraplegia</p> <p>Fluid balance – potential oliguria/anuria</p>
Clinical aims	<p>Systolic &lt;120mmHg with Labetalol* (first line) +/- GTN if required</p> <p>Fluid resuscitation if indicated</p> <p>Document plan for re-imaging or intervention planned</p>
Drug chart	<p>MRSA protocol</p> <p>Stop oral anticoagulation &amp; commence systemic heparin when indicated</p>
General	<p>Routine admission documentation</p> <p>Update family liaison hub</p> <p>Surgical consent form and Crossmatch when surgery indicated</p> <p>NBM, Clip chest, abdominal, both groins and legs on morning of surgery</p>

\*Consider administering labetalol (neat) via a centra line, especially if expected to be required for >6h or high doses required as high volume of dilution for peripheral labetalol my lead to fluid overload/electrolyte disturbance i.e. hyponatraemia

<b>TYPE B ACUTE AORTIC SYNDROME (AD, IMH, PAU)</b>	
<b>Management plan</b>	<ul style="list-style-type: none"> <li>• Clear documentation in the notes about management plan. Options:               <ul style="list-style-type: none"> <li>○ Conservative treatment (BP and pain control): First line</li> <li>○ Endovascular repair: If complications occur</li> <li>○ Open repair: If complications occur and there is no endovascular option</li> </ul> </li> <li>• Plan for repeating imaging and additional requests               <ul style="list-style-type: none"> <li>○ Repeat whole CT Aorta in 48hrs (earlier if clinical deterioration)</li> <li>○ TTE on admission – repeat if clinically indicated</li> <li>○ CTCA if plan for surgery</li> <li>○ CT Head / Limbs when clinically indicated</li> </ul> </li> <li>• Documentation of Responsible Consultant (Cardiac or Vascular Surgeon) and contact number for escalation</li> </ul>
<b>Blood pressure</b>	<ul style="list-style-type: none"> <li>• Keep systolic &lt;120mmHg with Labetalol* (First line) +/- GTN infusion</li> <li>• To remain in HDU/ITU setting until &gt; 24hrs without need for IV anti-hypertensives</li> <li>• Established on oral anti-hypertensives at least 48hrs prior to discharge home</li> <li>• Refer to Blood Pressure Consultant</li> </ul>
<b>Complications</b>	
<b>Management of complications</b>	
<b>Complications may include</b>	<b>Escalation process:</b>
<ul style="list-style-type: none"> <li>• Uncontrolled blood pressure</li> <li>• Persistent Pain</li> <li>• Expanding aortic diameters</li> <li>• Malperfusion</li> </ul>	<ol style="list-style-type: none"> <li>1. Cardiac Surgery Registrar On-Call</li> <li>2. Aortic Surgery Consultant</li> <li>3. ACCU Consultant if spinal drain alarming, not draining CSF or if one required</li> </ol>

\*Consider administering labetalol (neat) via a centra line, especially if expected to be required for >6h or high doses required as high volume of dilution for peripheral labetalol may lead to fluid overload/electrolyte disturbance i.e. hyponatraemia

Post op management of Type A AAS with Frozen Elephant Trunk (FET)	
ET tube	Extubate as per normal cardiac surgical pathway
Blood pressure	MAP >80-85mmHg with fluid expansion, and judicious use of noradrenaline +/- vasopressin if vasoplegia present  Consider CO monitoring (PA catheter) and TOE if unstable/escalating inotropic and/or vasopressor requirement  <b>Paramount to minimise risk of paraplegia</b>
Arterial line	Usually radial & femoral arterial line in situ. Remove one of them on Day 1.
PA sheath	If inserted leave in situ for a minimum of 24hrs
VasCath	Citralock vascath - RRT if indicated
Bloods	Send FBC, coagulation, U & E on admission  Baseline TEG 6S (Global Coagulation Cartridge) to correct coagulopathy – repeat as clinically indicated
Rewarm	Yes. Use bair hugger if needed
Chest drains	No routine removal. Follow Aortic Team instructions only
Neurovascular Obs	Full neurovascular observations - Use Aortovascular observation chart  <b>Escalate ASAP if lower limbs lack movement or perfusion issues.</b>  Emergency spinal drain insertion
Fluid Balance	Expect at least positive fluid balance of 1-2 Litres in first 24 hours.  Significant fluid administration often required.
Sedation	Early sedation-hold to assess lower limb movement (Max. 2h after ITU admission)  Escalate if no movement as might indicate SCI and require emergency insertion of spinal drain
Cerebral NIRS	Until extubated
VTE	As normal – no specific need for anticoagulation based on FET (refer to aortic valve indication)
Mobilise	Encouraged when possible



<b>Post op management of Type A AAS without Frozen Elephant Trunk</b>	
ET tube	Extubate as per normal cardiac surgical pathway
Blood pressure	MAP >65-70mmHg with fluid, and inotropes as instructed Consider CO monitoring (PA catheter) and TOE if unstable/escalating inotropic and/or vasopressor requirement
Arterial line	Usually radial & femoral arterial line in situ. Remove one of them on Day 1.
PA sheath	If inserted leave in situ for a minimum of 24hrs
VasCath	Citralock vascath - RRT if indicated
Bloods	Send FBC, coagulation, U & E on admission Baseline TEG 6S (Global Coagulation Cartridge) to correct coagulopathy – repeat as clinically indicated
Rewarm	Yes. Use bair hugger if needed
Chest drains	No routine removal. Follow Aortic Team instructions only
Neurovascular Obs	Full neurovascular observations - Use Aortovascular observation chart Escalate if lower limbs lack movement or perfusion issues.
Fluid Balance	Expect at least positive fluid balance of 1-2 Litres in first 24 hours Significant fluid administration often required
Sedation	Sedation-hold when clinically possible
Cerebral NIRS	Until extubated
VTE	As normal – need for anticoagulation based on aortic valve indication
Mobilise	Encouraged when possible

### Neurological Assessment Chart

<b>Date</b>																				
<b>Time</b>																				
<b>Pset</b>																				
<b>MAP</b>																				
<b>ICP (Pcsf)</b>																				
<b>CPP (MAP – ICP)</b>																				
<b>RASS/GCS score</b>		<b>RASS/GCS assessment at same time as Motor/Sensation Assessment - Document on ACCU observation chart</b>																		
<b>Cerebral O<sub>2</sub> Sats %</b>	<b>L</b>																			
	<b>R</b>																			
<b>Spinal O<sub>2</sub> Sats %</b>	<b>L</b>																			
	<b>R</b>																			
<b>Pupil size &amp; reaction</b>		<b>Pupil assessment at same time as Motor/Sensation Assessment - Document on ACCU observation chart</b>																		
<b>Motor Power &amp; Movement Assessment Score 0 - 5</b>	<b>Left Leg</b> <b>Score 0 - 5</b>	Point toes																		
		Flex foot																		
		Bend knee																		
	Patient unable to obey commands. Moves left leg spontaneously																			
	Unable to assess due to RASS/GCS. No spontaneous left leg movement																			
	<b>Right Leg</b> <b>Score 0 - 5</b>	Point toes																		
Flex foot																				
Bend Knee																				
Patient unable to obey commands. Moves right leg spontaneously																				
Unable to assess due to RASS/GCS. No spontaneous right leg movement																				
<b>Sensation - Normal (N), Impaired (I) or Absent (A)</b>	<b>Left Leg</b>	<b>Thigh</b> Normal Impaired Absent																		
		<b>Calf</b> Normal Impaired Absent																		
		<b>Foot</b> Normal Impaired Absent																		
	Unable to assess due to RASS/GCS																			
	<b>Right Leg</b>	<b>Thigh</b> Normal Impaired Absent																		
		<b>Calf</b> Normal Impaired Absent																		
<b>Foot</b> Normal Impaired Absent																				
Unable to assess due to RASS/GCS																				
<b>Signature</b>																				

**Peripheral Neurovascular (Limb perfusion) Assessment** (√ as appropriate)

		Date																
		Time																
Limb Pain Assessment	Pain at rest	None/mild																
		Moderate																
		Severe																
	On passive movement	None/mild																
		Moderate																
Severe																		
Pain since last analgesia	No pain/ Pain has improved																	
	Is the same																	
	Has worsened																	
Unable to assess		√																
IF unable to assess limb pain due to RASS/GCS – Document CPOT scores on ACCU observation chart																		
Pulse	Left lower limb	Normal																
		Weak																
		Doppler																
		Absent																
	Right lower limb	Normal																
		Weak																
		Doppler																
		Absent																
	Left upper limb	Normal																
		Weak																
		Doppler																
		Absent																
Right upper limb	Normal																	
	Weak																	
	Doppler																	
	Absent																	
Colour & capillary refill	Left lower limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
	Right lower limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
	Left upper limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
	Right upper limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
NIRS	O <sub>2</sub> Sats %	Left calf																
		Right calf																
Warmth	Left lower limb	Warm																
		Hot/Cool																
		Cold																
	Right lower limb	Warm																
		Hot/Cool																
		Cold																
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		Hot/Cool																
		Cold																
Signature																		

### Neurological Assessment Chart

<b>Date</b>																										
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<b>Cerebral O<sub>2</sub> Sats %</b>	<b>L</b>																									
	<b>R</b>																									
<b>Spinal O<sub>2</sub> Sats %</b>	<b>L</b>																									
	<b>R</b>																									
<b>Pupil size &amp; reaction</b>		<b>Pupil assessment at same time as Motor/Sensation Assessment - Document on ACCU observation chart</b>																								
<b>Motor Power &amp; Movement Assessment Score 0 - 5</b>	<b>Left Leg</b> <b>Score 0 - 5</b>	Point toes																								
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	Calf Normal Impaired Absent																									
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	<b>Right Leg</b>	Thigh Normal Impaired Absent																								
Calf Normal Impaired Absent																										
Foot Normal Impaired Absent																										
Unable to assess due to RASS/GCS																										
<b>Signature</b>																										

**Peripheral Neurovascular (Limb perfusion) Assessment** (√ as appropriate)

		Date																
		Time																
Limb Pain Assessment	Pain at rest	None/mild																
		Moderate																
		Severe																
	On passive movement	None/mild																
		Moderate																
Severe																		
Pain since last analgesia	No pain/ Pain has improved																	
	Is the same																	
	Has worsened																	
Unable to assess		√																
IF unable to assess limb pain due to RASS/GCS – Document CPOT scores on ACCU observation chart																		
Pulse	Left lower limb	Normal																
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	Right lower limb	Normal																
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	Left upper limb	Normal																
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Colour & capillary refill	Left lower limb	No skin colour change &/or CRT ≤2 sec																
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	Right lower limb	Warm																
		Hot/Cool																
		Cold																
	Left upper limb	Warm																
		Hot/Cool																
		Cold																
	Right upper limb	Warm																
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Signature																		

**Neurological Assessment Chart**

<b>Date</b>																
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Pset																
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<b>RASS/GCS score</b>			<b>RASS/GCS assessment at same time as Motor/Sensation Assessment - Document on ACCU observation chart</b>													
Cerebral O <sub>2</sub> Sats %	L															
	R															
Spinal O <sub>2</sub> Sats %	L															
	R															
<b>Pupil size &amp; reaction</b>			<b>Pupil assessment at same time as Motor/Sensation Assessment - Document on ACCU observation chart</b>													
<b>Motor Power &amp; Movement Assessment Score 0 - 5</b>	<b>Left Leg</b>	Point toes														
		Flex foot														
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	Patient unable to obey commands. Moves left leg spontaneously															
	Unable to assess due to RASS/GCS. No spontaneous left leg movement															
	<b>Right Leg</b>	Point toes														
Flex foot																
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<b>Sensation - Normal (N), Impaired (I) or Absent (A)</b>	<b>Left Leg</b>	Thigh Normal Impaired Absent														
		Calf Normal Impaired Absent														
		Foot Normal Impaired Absent														
	Unable to assess due to RASS/GCS															
	<b>Right Leg</b>	Thigh Normal Impaired Absent														
		Calf Normal Impaired Absent														
Foot Normal Impaired Absent																
Unable to assess due to RASS/GCS																
<b>Signature</b>																

**Peripheral Neurovascular (Limb perfusion) Assessment** (✓ as appropriate)

		Date																
		Time																
Limb Pain Assessment	Pain at rest	None/mild																
		Moderate																
		Severe																
	On passive movement	None/mild																
Moderate																		
Severe																		
Pain since last analgesia	No pain/ Pain has improved																	
	Is the same																	
	Has worsened																	
Unable to assess		✓																
IF unable to assess limb pain due to RASS/GCS – Document CPOT scores on ACCU observation chart																		
Pulse	Left lower limb	Normal																
		Weak																
		Doppler																
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Signature																		

### Neurological Assessment Chart

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<b>Spinal O<sub>2</sub> Sats %</b>	<b>L</b>																					
	<b>R</b>																					
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<b>Sensation - Normal (N), Impaired (I) or Absent (A)</b>		<b>Left Leg</b>	<b>Thigh</b> Normal Impaired Absent																			
	<b>Calf</b> Normal Impaired Absent																					
	<b>Foot</b> Normal Impaired Absent																					
	Unable to assess due to RASS/GCS																					
	<b>Right Leg</b>	<b>Thigh</b> Normal Impaired Absent																				
		<b>Calf</b> Normal Impaired Absent																				
<b>Foot</b> Normal Impaired Absent																						
Unable to assess due to RASS/GCS																						
<b>Signature</b>																						



**Peripheral Neurovascular (Limb perfusion) Assessment** (✓ as appropriate)

		Date																
		Time																
Limb Pain Assessment	Pain at rest	None/mild																
		Moderate																
		Severe																
	On passive movement	None/mild																
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Severe																		
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	Has worsened																	
Unable to assess		✓																
IF unable to assess limb pain due to RASS/GCS – Document CPOT scores on ACCU observation chart																		
Pulse	Left lower limb	Normal																
		Weak																
		Doppler																
		Absent																
	Right lower limb	Normal																
		Weak																
		Doppler																
		Absent																
	Left upper limb	Normal																
		Weak																
		Doppler																
		Absent																
Right upper limb	Normal																	
	Weak																	
	Doppler																	
	Absent																	
Colour & capillary refill	Left lower limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
	Right lower limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
	Left upper limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
	Right upper limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
NIRS	O <sub>2</sub> Sats %	Left calf																
		Right calf																
Warmth	Left lower limb	Warm																
		Hot/Cool																
		Cold																
	Right lower limb	Warm																
		Hot/Cool																
		Cold																
	Left upper limb	Warm																
		Hot/Cool																
		Cold																
	Right upper limb	Warm																
		Hot/Cool																
		Cold																
Signature																		

### Neurological Assessment Chart

<b>Date</b>																						
<b>Time</b>																						
<b>Pset</b>																						
<b>MAP</b>																						
<b>ICP (Pcsf)</b>																						
<b>CPP (MAP – ICP)</b>																						
<b>RASS/GCS score</b>		<b>RASS/GCS assessment at same time as Motor/Sensation Assessment - Document on ACCU observation chart</b>																				
<b>Cerebral O<sub>2</sub> Sats %</b>	<b>L</b>																					
	<b>R</b>																					
<b>Spinal O<sub>2</sub> Sats %</b>	<b>L</b>																					
	<b>R</b>																					
<b>Pupil size &amp; reaction</b>		<b>Pupil assessment at same time as Motor/Sensation Assessment - Document on ACCU observation chart</b>																				
<b>Motor Power &amp; Movement Assessment Score 0 - 5</b>	<b>Left Leg</b>	Point toes																				
		Flex foot																				
	<b>Score 0 - 5</b>	Bend knee																				
		Patient unable to obey commands. Moves left leg spontaneously																				
	Unable to assess due to RASS/GCS. No spontaneous left leg movement																					
	<b>Right Leg</b>	Point toes																				
Flex foot																						
<b>Score 0 - 5</b>	Bend Knee																					
	Patient unable to obey commands. Moves right leg spontaneously																					
Unable to assess due to RASS/GCS. No spontaneous right leg movement																						
<b>Sensation - Normal (N), Impaired (I) or Absent (A)</b>	<b>Left Leg</b>	Thigh Normal Impaired Absent																				
		Calf Normal Impaired Absent																				
		Foot Normal Impaired Absent																				
	Unable to assess due to RASS/GCS																					
	<b>Right Leg</b>	Thigh Normal Impaired Absent																				
		Calf Normal Impaired Absent																				
Foot Normal Impaired Absent																						
Unable to assess due to RASS/GCS																						
<b>Signature</b>																						

**Peripheral Neurovascular (Limb perfusion) Assessment** (✓ as appropriate)

		Date																
		Time																
Limb Pain Assessment	Pain at rest	None/mild																
		Moderate																
		Severe																
	On passive movement	None/mild																
		Moderate																
Severe																		
Pain since last analgesia	No pain/ Pain has improved																	
	Is the same																	
	Has worsened																	
Unable to assess		✓																
IF unable to assess limb pain due to RASS/GCS – Document CPOT scores on ACCU observation chart																		
Pulse	Left lower limb	Normal																
		Weak																
		Doppler																
		Absent																
	Right lower limb	Normal																
		Weak																
		Doppler																
		Absent																
	Left upper limb	Normal																
		Weak																
		Doppler																
		Absent																
Right upper limb	Normal																	
	Weak																	
	Doppler																	
	Absent																	
Colour & capillary refill	Left lower limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
	Right lower limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
	Left upper limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
	Right upper limb	No skin colour change &/or CRT ≤2 sec																
		Pale, cyanotic, mottled &/or CRT ≥ 2 sec																
NIRS	O <sub>2</sub> Sats %	Left calf																
		Right calf																
Warmth	Left lower limb	Warm																
		Hot/Cool																
		Cold																
	Right lower limb	Warm																
		Hot/Cool																
		Cold																
	Left upper limb	Warm																
		Hot/Cool																
		Cold																
	Right upper limb	Warm																
		Hot/Cool																
		Cold																
Signature																		

