

Emergency Laparotomy Peri-operative Care Pathway

This pathway should be started for **ALL patients presenting with acute abdominal conditions that may need emergency surgery**. The pathway is designed to provide guidance and improve the peri-operative care of these high-risk emergency cases.

Pre-operative information

NHS No.:	<small>Please attach addressograph label</small> Hospital No.:
Patients Name:	
Address:	
D.O.B.:	

Date of admission	<input type="text"/>
Admitting specialty	<input type="text"/>
Surgical Consultant	<input type="text"/>
Age	<input type="text"/>
ASA	<input type="text"/>
Weight (kg)	<input type="text"/>
Height (m)	<input type="text"/>

Risk Factors:	
Ischaemic heart disease	<input type="checkbox"/>
Congestive cardiac failure	<input type="checkbox"/>
Respiratory disease	<input type="checkbox"/>
Renal failure (creatinine >150µmol/l)	<input type="checkbox"/>
Diabetes Mellitus (requiring insulin)	<input type="checkbox"/>
Anticoagulants	<input type="checkbox"/>

Past medical history:

Allergies:

Surgical Consult:	
Date and time seen by surgical Spr: / / :
Date and time seen by surgical consultant: / / :
Working diagnosis:
Planned procedure:
Initial management:	
Operative	<input type="checkbox"/>
Non-operative	<input type="checkbox"/>

Theatre booking:	
Date and time of decision for theatre: / / :
Date and time booked: / / :
Anaesthetist informed	<input type="checkbox"/>
PERRT / ITU informed	<input type="checkbox"/>
NCEPOD classification:	
Immediate	<input type="checkbox"/>
Urgent	<input type="checkbox"/>
Expedited	<input type="checkbox"/>

Anticipated level of post-operative care:		
Level 2/3 (PACU/ICU) <input type="checkbox"/>	Level 1 (Ward) <input type="checkbox"/>	Bed booked <input type="checkbox"/>

Clinician completing pathway (Print and sign)
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Bleep number
.....

Designation:
FY1/FY2/CT1-2/ST3+

EMERGENCY LAPAROTOMY PERI-OPERATIVE CARE

Pre-operative ED/ Ward Checklist:

- IV Fluid prescribed **AND** administered
- Antibiotics prescribed **AND** administered
- Analgesia prescribed **AND** administered
- Fluid Balance chart started hourly
- Urinary catheter inserted
- Recent blood results reviewed
- Blood cross-matched
- ECG – checked and documented
- Chest X-ray – checked and documented
- Blood glucose checked and management plan in place
- Blood gas checked, documented
- VTE risk assessment completed
- VTE prophylaxis prescribed (**IF** appropriate) Y N
- Coagulopathy / thrombocytopenia present Y N
- Management plan for coagulopathy in place
- (refer to guidelines or on-call haematologist)
- Naso-gastric tube inserted (if appropriate) Y N
- Patient discussed with ITU outreach (SpR 07939135452)

Fluid management

- Maintenance fluids:** Total 1-1.5 ml/kg/hour
Consisting of oral fluids (if not contraindicated)
or IV compound sodium lactate (Hartmann's)
- Resuscitation:** If systolic BP <90 give 250-500 ml colloid bolus
Repeat if patient remains hypotensive 15
minutes after administration (provided no
congestive cardiac failure)
- Replacement of electrolytes:** With appropriate supplements guided by blood
test / ABG results (exercise caution with renal
impairment)

If the patient develops cardiac failure, or hypotension continues despite fluid resuscitation, call Senior team member for urgent review and consider PERRT/ITU outreach review

Clinician completing pathway (Print and sign)

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Bleep number

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Designation:

FY1/FY2/CT1-2/ST3+/SG/Cons

Date

Pre-operative Clerking

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Pre-operative Clerking

Date

Pre-operative Clerking

Pre-operative Clerking

Intra-operative management

To be completed by the Anaesthetist in addition to the anaesthetic record

Date and time of arrival in theatre
 / :

Most senior anaesthetist present
 (at any point during the procedure)

Consultant
 Staff grade/Clinical fellow
 ST (please specify grade)
 CT 1-2
 Consultant Anaesthetist informed **Y** **N**

Surgical procedure performed:

Most senior surgeon present
 (at any point during the procedure)

Consultant
 Staff grade/ Clinical Fellow
 ST (please specify grade)
 CT1-2
 Consultant Surgeon informed **Y** **N**

Invasive monitoring used:

Arterial line
 Central venous catheter
 Oesophageal Doppler
 LiDCO rapid/plus
Invasive monitoring not appropriate
 Reason:

Vasopressor infusion required

Phenylephrine/ metaraminol
 Noradrenaline
 Inotropes required **Y** **N**
 Blood products required

PRC
 FFP
 platelets
 cryoprecipitate

Surgical Site Infection Prophylaxis:

Antibiotics: Given prior to induction Given on induction Time ... : ... Dose

Antibiotic regimen reviewed based on surgical findings
 Consider escalation and additional agents (e.g. gentamicin, antifungal)

Temperature monitoring and appropriate warming techniques

Post-operative plan:

Patient transferred to: ICU (level 3) PACU (level 2) PACU in recovery

Recovery If Level 2/3 care to be continued in recovery the anaesthetist is to remain with patient

Post-op CXR, CVC, NG correct placement checked, blood sugar, ABG
 Fluids/antibiotics/analgesia prescribed and administered

Anaesthetist (Print and sign) **Bleep number** **Designation:**
 FY1/FY2/CT1-2/ST3+/SG/Cons

	Hospital: Ward:	Hospital No: Surname: First Name: Date of Birth: Age:
FROM WARD	Date Operation Proposed	
SURGEON OR HOUSE SURGEON	Operation Notes: Surgeon: Incision: Assistant: Operative Findings: Operation: Drains: Packs:	
TO WARD SISTER	POST-OPERATIVE INSTRUCTIONS:	

Initial post-operative management - ITU/PACU/Recovery

Handover:

Anaesthetist to ITU Doctor Theatre staff to ITU Nurse
 Date and time of ITU Admission: ... / ... / :

Investigations checked and documented:

Admission bloods ABG ECG CXR (central line/NGT placement)

Respiratory management: Aim PaO₂ > 10kPa and PaCO₂ < 6kPa

If intubated: ensure ventilation in line with low volume moderate PEEP lung protective strategy

If extubated: early chest physiotherapy if appropriate with hourly appropriate ABG monitoring

Cardiovascular management:

Aim MAP > 65 mmHg (adjust for hypertension)

Fluid management:

- Hartmann's maintenance 1-1.5 ml/kg/hour in total including enteral feed

Inotrope/vasopressor:

If Fluid management fails to maintain MAP > 65 mmHg

- Consider starting noradrenaline
- Consider starting inotrope if CO < 4.0 L/min
- Discuss with ITU consultant if clinical deterioration or any concerns

Hydrocortisone – consider if on-going septic shock / increasing inotrope or vasopressor requirements

Renal management:

Aim urine output > 0.5 ml/kg/hour

- Ensure adequate intravascular volume and appropriate MAP sustained with fluid therapy +/- vasopressors/inotropes (as required)
- Consider CVVHF if oligo-anuria **and** fluid overload / persistent metabolic acidosis / hyperkalemia (discuss with ITU consultant)

Microbiology:

Antibiotic plan prescribed in accordance with trust guideline

- Discuss all emergency laparotomies with on-call ITU/microbiology team

General:

VTE prophylaxis – prescribed in line with surgical plan

GI prophylaxis – PPI prescribed in line with ITU protocol

Analgesia – prescribed and administered with good effect, plan pain team review

Metabolic – aim blood glucose 6-10 mmol/l (insulin sliding scale if necessary)

Nutrition – oral / NG / NJ/ TPN feed (follow surgical plan)

Relatives – next of kin contacted (aim early family discussion)

Bleeding/coagulopathy – stop anticoagulants, inform Surgical Registrar, check Hb and coagulation, correct as necessary (discuss with on-call ITU/Haematology consultant)

Inform Surgical Registrar for urgent review – if bleeding, acute infection, sepsis, cardiac event, acute surgical complications

Clinician completing ITU pathway (Print and sign)

Bleep number

Designation:

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FY1/FY2/CT1-22/ST3+/SG/Cons 7

Ongoing post-operative management – ward

This section is to be completed by the surgical team upon return to the ward area from ITU/PACU/Recovery.

Date and time returned to ward ... / ... / ... : ... Handover completed

Initial observations:

HR	
BP	
RR	
Sats O ₂	
FiO ₂	
Temp	
U/O	
EWS	

IV fluids prescribed Hartmann's maintenance (1-1,5 ml/kg/hour in total including feed)	<input type="checkbox"/>
Hourly fluid balance chart	<input type="checkbox"/>
VTE prophylaxis assessed	<input type="checkbox"/>
GI prophylaxis	<input type="checkbox"/>

Analgesia prescribed:	
Epidural	<input type="checkbox"/>
Morphine PCA	<input type="checkbox"/>
Regular/PRN	<input type="checkbox"/>
Nutrition (aim early enteral feeding):	
Plan	
.....	
Oral (+/- supplements)	<input type="checkbox"/>
NG/NJ	<input type="checkbox"/>
TPN	<input type="checkbox"/>

Wound condition	
Antibiotics prescribed	<input type="checkbox"/>

Post-op investigations:	
FBC, U&E +/- LFTs, clotting	<input type="checkbox"/>
ScvO ₂ (if central line)	<input type="checkbox"/>

Fluid management

Maintenance fluids: Total 1-1.5 ml/kg/hour
Consisting of oral fluids (if not contraindicated)
or IV compound sodium lactate (Hartmann's)

Resuscitation: If systolic BP <90 give 250mls colloid bolus
Repeat if remain hypotensive 15 minutes post
administration (provided no congestive cardiac
failure)

Replacement of Electrolytes: With appropriate supplements guided by blood
test / ABG results (exercise caution with renal
impairment)

**If the patient develops cardiac failure, or hypotension continues despite fluid
resuscitation call Senior team member for urgent review and consider Critical Care
Outreach/ITU review**

Cardiorespiratory goals:	U/O > 0.5 ml/kg/hour
HR <100 >60	RR <20
BP systolic <160 >90	Sats O ₂ >92% on oxygen
ScvO ₂ >70%	Glucose 6-10 mmol/l

If goals are not being met or NEWS is 3 or more –senior team member/PERRT/ITU outreach must review

Date

Continuation sheet

GENERAL SURGERY

Date

Continuation sheet

GENERAL SURGERY

Date

Continuation sheet

GENERAL SURGERY

Date

Continuation sheet

GENERAL SURGERY