NHS
Wessex Trauma Network

IN EXTREMIS STANDARD OPERATING PROCEDURE

May 2020

Wessex Trauma Network In Extremis SOP		Version:	1
Date Issued:			
Review Date:			
Document Type:	Standard Operating Procedure SOP		

Contents		Page
Paragraph	Executive Summary	3
1	Scope and Purpose	3
2	Details of Procedure	3
3	Roles and Responsibilities	5
4	Communication Plan	5
5	Process for Monitoring Compliance/Effectiveness of this Policy	5
6	Arrangements for Review of this Policy	5

Document Status
This is a controlled document. Whilst this document may be printed, the electronic version posted on the intranet is the controlled copy. Any printed copies of this document are not controlled. As a controlled document, this document should not be saved onto local or network drives but should always be accessed from the intranet.

Executive Summary

This policy outlines how TU clinicians should respond when an in extremis situation arises.

There will be rare occasions when a patient who has suffered severe Trauma will be brought to a Trauma Unit (TU) Emergency Department (ED) for emergency stabilisation. This will occur when an ambulance crew is unable to control the airway or circulation of a patient who has met the Wessex Trauma Network (WTN) Trauma Unit Bypass (TUB) Tool (appendix A), to allow primary transfer by the ambulance service to a Major Trauma Centre (MTC). Such patients are defined as being "In Extremis." It is recognised nationally that a patient in extremis has by definition a high mortality rate.

1. Scope and Purpose

This SOP applies to all Trauma Units within the Wessex Major Trauma Network.

It is to support the management of these extremely rare but critically ill patients.

The priority of trauma teams managing such patients should be to stabilise the patient as quickly as possible to allow rapid onward transfer to the MTC.
Ambulance crews may be held for up to one hour for onward transfer to the MTC.

2. Details of Procedure

- When a pre-alert for a TUB tool positive patient is received by a TU ED and the patient is identified as being In Extremis a Trauma call should be made
- The Trauma team leader (TTL) should ensure the following are called and attend as well as middle grades who would normally attend a trauma call:
    - Emergency Medicine consultant (if not already present)
    - Consultant Anaesthetist
    - Consultant General Surgeon
    - Consultant Trauma & Orthopaedic Surgeon
    - Consultant Paediatrician (for children aged 16 or younger)
- If available the following should also attend:
    - Consultant Radiologist
    - Consultant Haematologist
- Aim to stabilise airway and circulation ASAP and if achieved transfer on to MTC within 30 minutes without further investigations / delay
- Such patients will be automatically accepted by the MTC in line with WTN automatic acceptance criteria.
- TTL should phone the MTC ED Consultant & inform them of the incoming transfer.

If patient deemed too unstable for onward transfer: damage control resuscitation is needed.

- CT should be performed within 30 minutes of patient arrival, **if patient is stable enough**
- Interventional Radiology can be considered for embolisation – but *only* if immediately available.

- If patient's circulation is too unstable to go to CT a bedside cavity assessment is needed. Obtain on the resus trolley in the Resus Room:
    - XR Chest
    - XR Pelvis

    - An eFAST scan performed by a RCEM level 1 FAST credentialed practitioner (do **not** perform if not signed off at level 1/ supervised by a level 1 signed off practioner) to assess for intra-peritoneal fluid
- Ensure pelvic binder correctly applied at level of greater trochanters, ideally with 2 pillows under knees, with knees and ankles bandaged together
- If catastrophic haemorrhage identified – activate massive haemorrhage protocol ASAP (ideally at time of pre-alert)
- If patient has catastrophic bleeding identified and it is not possible to stabilise the circulation for onwards transfer:
    - Immediate transfer to the operating theatre for continued resuscitation which may include:
        - emergency Trauma laparotomy
        - pelvic packing against pelvic binder &/or pelvic external fixator
        - thoracotomy
        - ensure urinary catheter in place, if able to be done.
- Liaise with Haematology lab & Consultant to guide blood products + use of TEG/ROTEM if available
- Minimise use of crystalloid
- In operating theatre:
    - Place patient supine on gel beneath patient
    - Use radiolucent operating table if available
    - Use warm air warmers wherever possible with minimal disturbance
    - Ideally have 1 experienced Consultant unscrubbed and indirectly involved with the resuscitation who acts as overall Trauma co-ordinator and team leader
    - Damage Control Surgery principles to be followed
    - Blood gases to be done every 20 minutes with results clearly communicated to all in theatre and recorded on board
    - Long bone fractures:
        - Upper limb – POP slabs
        - Femur – Denham pin in distal femur or proximal tibia (if no knee injury) and apply skeletal traction
        - Tibia – POP slab
    - Have one senior member of nursing staff to act as family liaison to update relatives every 30 minutes
    - Aim for in theatre resuscitation to be done within 60 minutes: for then *one* of:
        - Transfer to MTC
        - Transfer to CT
        - Transfer to ITU
- If death imminent and unavoidable, or occurs:
    - All team to be consulted in theatre to agree stopping of resuscitation
    - Relatives to be informed asap by senior Consultants + nurse
    - Body to be cleaned, transferred to a bed – leaving all lines, tubes, plasters, fixation/stabilisation devices in place – and transferred to quiet area of recovery for relatives to view
    - Immediate Team brief (before end of shift)
- All documentation by all members of team to be completed asap, and no later than 6 hours from end of incident
- Further team debrief to occur within 2 weeks of incident

3. Roles and Responsibilities

Trauma Units

- To implement this SOP within the ED Clinical teams
- To ensure all staff are aware of what to do in an in extremis event
- To advise WTN team of any updates required

Major Trauma Centre

- To ensure secondary transfer is undertaken swiftly

Trauma Network

- To review any in extremis event with the TU following the event and disseminate any learning

4. Communication Plan

Development and formulation of SOP via TU and MTC leads at WTN meeting, for feedback and then agreement.
Once ratified the following will need to occur:

- TU Trauma Leads to cascade and implement this SOP within their respective Trusts

5. Process for Monitoring Compliance/Effectiveness

The purpose of monitoring is to provide assurance that the agreed approach is being followed – this ensures we get things right for patients, use resources well and protect our reputation. Our monitoring will therefore be proportionate, achievable and deal with specifics that can be assessed or measured.

Key aspects of the procedural document that will be monitored:

What aspects of compliance with the document will be monitored	What will be reviewed to evidence this	How and how often will this be done	Detail sample size (if applicable)	Who will co-ordinate and report findings (1)	Which group or report will receive findings
Management of in extremis patients at TU's	Self-reporting at ISS >15 review	Quarterly	All in extremis episodes in reporting period	WTN Governance Lead	WTN Network Governance Meeting

(1) State post not person.

Where monitoring identifies deficiencies actions plans will be developed to address them.

6. Arrangements for Review of the Policy

This SOP will be reviewed 3 years after ratification or earlier if required.

WTN In extremis SOP	Version: 1

Document Monitoring Information	
Approval Committee:	
Date of Approval:	
Ratification Committee:	
Date of Ratification:	
Signature of ratifying Committee Group/Chair:	Insert Signature or name (Chair of PRG if Level 1 document)
Lead Name and Job Title of originator/author or responsible committee/individual:	
Policy Monitoring (Section 6) Completion and Presentation to Approval Committee:	
Target audience:	
Key words:	
Main areas affected:	
Summary of most recent changes if applicable:	New document
Number of pages:	10
Type of document:	SOP
Does this document replace or revise an existing document	No
Should this document be made available on the public website?	No
Is this document to be published in any other format?	No