Network(s) Midlands Trauma Networks
Publication:
Document name: Vascular Trauma presenting to Trauma Units or Local Emergency Hospitals.
Document purpose: This document contains the pathway process for vascular trauma in the Central England Trauma Network
Author: Central England Trauma Network - Matthew Wyse (Major Trauma Clinical Lead) 2018 Reviewed by Nick Matharu (UHCW Vascular Consultant) and John Mcarthur (UHCW T&O Consultant) July 2023
Publication date:February 2018Date reviewed: July 2023Review due date:July 2026Ref No. 28
Target audience: Central England Major Trauma Centre, Central England Trauma Units & Local Emergency Hospitals, East Midlands Ambulance Service
Action required: Dissemination to MTC, TU, LEH personnel for action. Dissemination to Ambulance Provider Representatives for information.
Contact details for further information: Midlands Critical Care, Trauma and Burns Networks 15 Frederick Road Birmingham B15 1JD
Document status: The controlled copy of this document is maintained by the Midlands Critical Care & Trauma Networks. Any copies of this document held outside of that area, in whatever format (e.g. paper, email attachment), are considered to have passed out of control and should be checked for currency and validity.

## Introduction

Severe vascular trauma should be taken directly to the Major Trauma Centre. Variations in triage and on scene circumstances may mean that patients with vascular trauma will occasionally present to a trauma unit. Northampton General Hospital provides the vascular service for Northamptonshire, and the expertise of local vascular surgeons can be utilized in the correct circumstances. Severe vascular trauma should utilise the Hyper-acute transfer protocol to the MTC ED.

Isolated hand trauma is unlikely to be major trauma should be dealt with using exiting clinical pathway to the linked hand service (Leicester Royal for patients presenting to KGH or NGH)

# For cases in the Emergency Department in a TU/ LEH with a vascular element

### Mangled limb

Transfer to MTC ED via hyper-acute pathway. Use pressure dressings and haemostatic dressings to control bleeding.

#### Uncontrolled Haemorrhage from junctional region (axilla, groin)

Attempt haemostasis with pressure Dressings and haemostatic gauze. Resuscitate with blood products to permissive hypotension Transfer to MTC ED via Hyper-acute pathway Only operate locally if vascular surgeon immediately available

#### Limb bleeding requiring Tourniquet to achieve haemostasis

If associated with polytrauma – transfer to MTC ED via hyper-acute pathway.

If isolated, gently release the tourniquet in a controlled fashion - if still bleeding severely and no vascular surgeon available then transfer direct to the MTC ED via hyper-acute pathway.

#### Pulseless limb

If associated with polytrauma - transfer to MTC ED

A dislocated knee is a rare occurrence associated with high energy trauma to the leg. There is a high incidence of vascular injury to popliteal vessels. This injury needs careful assessment and if there is any suspicion of arterial injury a CT Angiogram is necessary. If arterial injury is proven the vessel needs to be explored and it is highly likely that fasciotomies will be required. If this surgery cannot be performed in the TU, then hyper-acute transfer to the MTC is required.

The presence of a vascular rota covering the two Northamptonshire trauma units should not be used to allow TU to TU transfer. In the case of acute vascular trauma presenting to KGH then the patient should be transferred to the MTC via the Hyper-acute pathway and not to NGH.