

Executive summary

Rapid, accurate diagnosis and management of patients with injured extremities associated with limb ischaemia is crucial for optimum outcome. Immediate referral and transfer to specialist centres, capable of handling vessel damage and complex fracture care is mandated. To achieve this, clear and consistent communication is required.

In the Northern Trauma network, arterial injuries associated with dislocation or fractures bypass Trauma Units (TU) to the Major Trauma Centres (Newcastle or Middlesbrough). Any patient that for some reason is not bypassed, will have an Emergency Department (ED) to ED transfer. At each MTC there is a single point of contact. At all times the patient and their injury components will be managed in accordance with [BOAST guidance](#).

Managing the injury along BOAST guidance will ensure effective clinical management. **It is important to emphasize that Haemorrhage should be controlled immediately by direct pressure or tourniquet and that a pulseless, deformed limb should be re-aligned, splinted and the vascular examination repeated at the time of diagnosis and prior to transfer.**

The critical step in outcome is the communication and this document is focussed on this.

Communication and coordination of patients

Patients coming directly to James Cook University Hospital (JCUH), Middlesbrough

As part of ongoing, longitudinal resuscitation, call the vascular surgery registrar immediately. If the patient is the subject of a red trauma call, the vascular team will be present as default. There will be onward cascading of information to the on call Vascular, Orthopaedic and Plastic surgery consultants. A documented agreed, specialist management plan must be available within one hour. The patient should be transferred to the recovery area of theatres to enable prompt surgical intervention once all other elements of emergency care are dealt with and handed over.

Patients at Darlington or North Tees Emergency Departments

Call the vascular surgery registrar at (JCUH) immediately. There will be onward cascading of information to the on call Vascular, Orthopaedic and Plastic surgery consultants. A documented agreed specialist management plan must be available within one hour. The patient should be blue light ambulance transferred to JCUH ED once the referral call has been made. If the vascular surgery team are not contactable, the patient should be transferred regardless.

Patients coming directly to Royal Victoria Hospital, Newcastle

Initial treatment in ED – as above

Call Orthopaedic Surgeon on call

Call Vascular Surgeon on call

Call Plastic Surgeon on call for microvascular input as necessary

Plan for appropriate early surgery

Patients at Durham, Sunderland, Gateshead, Cumberland and NSEC Emergency Departments

TU ED senior decision maker to contact ED senior decision maker on call at RVI MTC via pre-alert phone (0191 2820311) and advise of impending transfer of patient, with concise history and timings of injury.

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RELATED INFORMATION	BOAST guidance.