



Trauma Tertiary Survey

Plymouth Hospitals **NHS**
NHS Trust

Tactics, Techniques
and Procedures

Action:	Cardiothoracic Surgery Middle Grades, CT Consultants General Surgery Middle Grades, GS Consultants Neurosurgery Middle Grades, NS Consultants Plastic Surgery Middle Grades, PS Consultants Trauma & Orthopaedic Middle Grades, T&O Consultants Coordinating Trauma Consultants Major Trauma Centre Coordinators		
Info:	MTMC Speciality Leads		
Related documents:	Trauma Call SOP, TTS & MS record HRSG 0705/1		
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Authors:	SAA, CM, MDB		

References: 1. American College of Surgeons, Initial assessment and management. *In Advanced Trauma Life Support Program for Doctors*. 9th ed.

2. Walter L. Biffi, William G. Cioffi. Implementation of a Tertiary Trauma Survey Decreases Missed Injuries. *J Trauma*. 2003; 54: 38-44,

3. NHS England Major Trauma Measure T14-2C-107

1. **Introduction.** The Tertiary Trauma Survey (TTS) is a patient evaluation that identifies and catalogues all injuries after the initial resuscitation and any subsequent emergent operative interventions. It is a comprehensive review of the medical record with emphasis on the mechanism of injury and pertinent co-morbid factors. The TTS includes the repetition of the primary and secondary surveys, a review of all laboratory data, and a review of all related radiographic studies. Any new physical findings require further studies to rule out missed injuries.

2. **Timing.** The timing of this survey typically occurs within twenty four hours of admission and is repeated when the patient is awake, responsive, and able to communicate any complaints.

3. **Inclusion Criteria.** The TTS is to be routinely carried out on all TARN (Trauma Audit Research Network) candidate patients. TARN candidate is defined as all patients whose potential Injury Severity Score is 9 or greater or who have TARN qualifying injuries.

4. **Patient Identification.** Patients requiring TTS will be identified by the Major Trauma Centre Coordinator Team. A report detailing all patients who are in need of and are fit to have a TTS will be emailed out to the responsible Consultants and their middle grades on Monday and Thursday.

5. **Responsible Clinician.** The Consultant who is responsible for carrying out the survey will depend on each patient's injury pattern and admission pathway:

a. All Hospital Trauma calls: the T&O Episode Consultant is responsible for ensuring completion of the TTS.

b. All other Secondary or Tertiary transfers and TARN candidate patients; the Lead single Speciality Team Episode Consultant is responsible for ensuring completion of the TTS, except Medicine, Maxillofacial or where LsST is not defined.

c. All other patient groups; the coordinating Trauma Consultant (cTC) is responsible for carrying out the TTS.

6. **Procedure.** The TTS is a complete head to toe physical examination and review of all radiologic and laboratory studies related to the admission episode. The findings of the survey are to be documented in the Tertiary Trauma Survey and Management Summary paperwork at Annex A. A further TTS will be required once the results of any additional investigations are available.

7. In tertiary transfers the TTS is to be carried out on admission.

8. The TTS is to be repeated by the responsible Consultant's team until the patient is able to comply with commands or reaches Day 14 post injury. At that point a best effort TTS should be completed. Thereafter the Lead single Speciality Team (LsST) of the patients' on going care or rehabilitation is responsible for further assessment. Anatomic delineation of LsST responsibilities can be found at Annex B.

9. The Major Trauma Centre Co-ordinators are responsible for ensuring availability of TTS & MS forms

10. **Assurance.** Compliance with the SOP will be assured via monthly audit presented at the Major Trauma Management Committee (MTMC) meeting.

11. **Summary.**

When: Within 24 hours of admission or identification of occult injury and repeated until fully awake or 14 days post index injury

Where: Anywhere except Emergency Department

How: Head to toe examination, with review of all studies and documentation of results and plan

Who (Responsible Clinician):

1: All Hospital Trauma Calls

Trauma and Orthopaedic Episode Consultant

2: All other Secondary or Tertiary Transfers and TARN candidate patients except Medicine or where LsST is not defined ;

Lead single Speciality Team Episode Consultant

3: All other patients

Co-ordinating Trauma Consultant

Lead single Speciality Team (LsST)

Upper Limb Conditions

Bone, Joint, Tendon and Ligament Injury

Consulting Speciality

Plastics: Fractures distal to the carpus
Tendons beyond distal biceps tendon insertion

Orthopaedics: All other conditions

Skin, Muscle and Nerve Injury

Consulting Speciality

Plastics

Vascular Injury

Consulting Speciality

Vascular: Proximal to (and including) forearm bifurcation

Plastics: Distal to forearm bifurcation

Infection and Foreign Body Penetration

Consulting Speciality

Medicine: Cellulitis

Orthopaedics: Septic Arthritis / Osteomyelitis (proximal to the metacarpals)

General Surgery: Axilla

Plastics: All other conditions

Lower Limb Conditions

Bone, Joint, Ligament, Skin, Muscle, Tendon and Nerve Injury

Consulting Speciality

Plastics: Pre-tibial lacerations / Isolated skin loss

Orthopaedics: All other

Vascular Injury

Consulting Speciality

Vascular: Proximal to (and including) the tri-furcation

Plastics: Distal to the tri-furcation

Infection and Foreign Body Penetration

Consulting Speciality

Medicine: Cellulitis

General Surgery: Buttock and groin

Orthopaedics: All other conditions

Trunk Conditions

Bone and Joint Injury

Consulting Specialty

Spinal Surgery: Spinal Column

Cardiothoracic: Chest Survey Score ≥ 21

*******:** Chest Survey Score ≤ 20

Orthopaedics: All other conditions

Skin and Muscle Injury

Consulting Specialty

Urology/Gynaecology: Genitalia

General: All other conditions

Vascular Injury

Consulting Speciality

Orthopaedics: Pelvic ring injury

Vascular (via General Middle grade): All other conditions

Infection, Foreign Body Penetration and Visceral Injury

Consulting Speciality

Medicine: Cellulitis

Spinal Surgery: Spinal Cord

Urology/Gynaecology: Urogenital System

General Surgery: All other conditions

Head & Neck Conditions -tbc

Bone and Joint Injury

Consulting Specialty

Skin and Muscle Injury

Consulting Speciality

Vascular Injury

Consulting Speciality

Infection, Foreign Body Penetration and Visceral Injury

Consulting Speciality
