



**Southeast Minnesota Regional Trauma
Advisory Committee (SMRTAC)**

Regional Practice Management Guideline

Initial Management of Major Trauma Patient
Level IV Trauma Center

Adult Practice Management Guideline	Effective: 11/2011
Contact: SMRTAC Coordinator	Last Reviewed:

Purpose

State the appropriate assessment and care of the major trauma patient in a Minnesota designated Level IV Trauma Center. This guideline assumes no consistent surgeon availability to respond to the Emergency Department for patients meeting trauma activation criteria.

Definitions

1. Trauma patient – any patient suffering an injury. For the purposes of this guideline the definition is any patient who may be at risk for a life or limb threatening injury.
2. Trauma activation – a defined team response to a patient at risk for major trauma. Every trauma center has defined trauma activation criteria as required by the Minnesota Statewide Trauma System
3. Initial management – the process of assessment and recognition all life threatening injuries and the provision of appropriate interventions in a timely and organized manner.
4. Primary survey – The first steps in the initial management of the trauma patient. Includes airway maintenance with cervical spine protection, breathing and ventilation, circulation with hemorrhage control, assessment of the neurologic status (disability), and exposing the patient to identify any areas of hemorrhage or severe injury while also assuring hypothermia prevention.
5. Secondary survey – The second portion of trauma initial management where a complete head-to-toe assessment is completed. This includes turning the patient to assess for any posterior injuries.

Policy Statements

1. All trauma patients should be evaluated using the principles of trauma assessment as stated in the Advanced Trauma Life Support (ATLS) course and Comprehensive Advanced Life Support (CALS) courses. This includes a thorough assessment and appropriate management including all of the steps in a primary and secondary survey.
 - a. Life threatening injuries are more apt to be recognized by an organized systematic evaluation during a primary and secondary survey.
2. All trauma patients needing definitive management should be transferred to a tertiary care facility (Level 1 or Level 2 center) as expeditiously as possible, especially those patients

- demonstrating physiologic instability. Disposition planning should take place immediately upon recognition the patient has (or the potential for) major trauma.
- a. Once ABC's are stabilized to the best ability of the referring hospital transfer should not be delayed for any reason. This includes delays that may be caused by obtaining additional imaging outside of the trauma bay.
3. EMTALA (Emergency Medical Treatment and Active Labor Act) requirements will be followed by both the transferring and receiving hospitals.
 4. Hospitals should follow their Trauma Team Activation Policy as required by the Minnesota Statewide Trauma System for Level IV hospitals.

Procedure Statements

1. Activate the trauma team (according to hospital policy) upon notification of patient meeting criteria.
2. Organize the trauma team members upon presentation to the trauma bay.
 - a. Develop an initial plan of care based on the information that is available.
 - b. Consider resources the patient may need and begin preparations for transfer prior to patient arrival if appropriate. Hospitals should follow their own policies for transfer criteria (as required by the Minnesota Statewide Trauma System).
3. Provide appropriate initial management by completing a primary and secondary assessment.
 - a. Primary Survey
 - i. Airway – Assure patient had a patent and adequate airway. Provide airway support if needed.
 1. Assure the c-spine is stabilized during this assessment.
 - ii. Breathing – Assure patient has adequate oxygenation and ventilation. Provide supplemental oxygen via a route and rate appropriate for the patient. Perform needle decompression or insert chest tubes if warranted.
 - iii. Circulation – Assure patient has no obvious areas of bleeding and IV access is obtained using large bore catheters (18g or larger in adults). Begin fluid resuscitation with crystalloid and/or blood if needed. Consider obtaining ABG or lactate level for assessment of shock state. (Do not delay transfer to obtain labs.)
 - iv. Disability – Assess and record the patients Glasgow Coma Score and pupil response
 - v. Expose/Environment – Completely expose the patient (includes removing all clothing) and assess for obvious injuries or areas of bleeding. Provide warming measures.
 - b. Secondary Survey
 - i. Garner as much history as possible from EMS, patient and/or family, patient medical records, etc.
 - ii. Conduct a thorough head to toe assessment. This includes turning the patient and evaluating the back.
4. Determine need for transfer
 - a. Initiate early call for transport.
 - b. Call tertiary care facility for transfer as soon as possible.
5. Conduct further imaging outside of trauma bay if determine patient is not going to be transferred.
6. Consider resources available for family support

Resources/Links

Rural Trauma Team Development Course (RTTDC) 3rd Edition

Advanced Trauma Life Support for Doctors (ATLS) Eighth Edition

Comprehensive Advanced Life Support Course (CALS)

Minnesota Statewide Trauma System Hospital Resources, Level IV Designation Criteria

Prepared by: SMRTAC leadership
Approvals: SMRTAC 12/15/2011

Disclaimer: This is a general guideline and is not intended as a substitute for clinical judgment or as a protocol for the management of all trauma patients.