Victorian State Trauma System Guideline

Older Person Trauma

RAUMA VICTORIA

Make early contact with ARV for advice from the major trauma services and to initiate retrieval.

- Older patients are more vulnerable and less adaptable to physiological changes due to pre-existing health issues .
- A high index of suspicion of injury should be considered even with mild injury mechanism.
- Medications may mask signs of shock.

Early Activation

- Gather vital information
- Activate Trauma Team
- Designate roles
- Set up to receive patient
- Ensure safety using PPE

Primary Survey

AIRWAY / C-SPINE

- Asess airway stability & protect as required
- May have diminished cough and gag
- Care needed when inserting OPA/NPA
- Incomplete, ill-fitting dentures may need to be removed prior to intubation
- Maintain full spinal precautions

BREATHING

- Identify and treat life threats
- Assess RR, work of breathing, SpO_2 & symmetry
- Oxygen therapy to maintain SpO_2 between 94-98%
- $ETCO_2$ monitoring if intubated, maintain btw 35-45mmHg

CIRCULATION:

- Insert x 2 large bore IV cannulas
- IO access if required
- Assess HR/BP/Cap refill
- Initial management of hypovolaemia - cystalloid fluids, 20mL/kg, then consider blood products
- Monitor the patient's physiological response

DISABILITY

- Assess conscious level - AVPU
- Check pupils
- Test BSL
- Note if patient is taking anti-coagulant medication

EXPOSURE / ENVIRONMENT

- Fully expose and inspect patient
- Prevent heat loss
- Log roll

ADJUNCTS

- FAST scan
- Analgesia
- X-ray: Chest, Pelvis
- Bloods – FBE, X-match, U&E, Lipase, LFT, Lactate, ABG, Troponin
- 12 lead ECG
- Orogastric tube if intubated
- AMPLE mnemonic

Does patient meet potential major trauma criteria for inter-hospital transfer?

N

- Manage cervical spine using NEXUS criteria
- Perform secondary survey
- Monitor vital signs and GCS closely
- Observe in facility
- Provide required care, discharge and follow up as necessary

Y

Notify ARV to conduct case assessment

Patient meets potential major trauma criteria?

N

- Perform complete trauma evaluation including secondary survey
- Monitor vital signs and GCS closely
- Observe in facility
- Seek advice from ARV coordinators regarding treatment options
- Provide required care
- Involve other medical specialties as required
- Consider discharge destination, especially if pt lives alone
- Contact ARV if deterioration in patients condition occurs

Consider social situation prior to discharging the older person overnight, particularly if they live alone. Ensure safety

Y

- Prepare patient for retrieval and definitive care
- Perform any interventions as necessary to stabilise patient for transfer
- Imaging as required if time and safety allows
- Maintain spinal precautions as required
- Prevent heat loss
- Monitor vital signs and respond promptly to deterioration
- Ensure clear, accurate and concise documentation
- Obtain history & commence secondary survey if time allows
- Consider Analgesia / Antibiotics / Tetanus
- Communicate with and support family and friends
- Communicate advanced treatment orders

Key Points

Mechanism

- Falls are the leading cause of trauma related mortality in the older person population, with low falls (<1m) steadily rising. Trauma may also have been preceeded by a medical event.
- A higher index of suspicion of injury should be maintained even with a seemingly innocuous mechanism of injury.
- Older patients are twice as likely to have a spinal cord injury as a younger patient with the same mechanism. Degenerative changes and stiffening of the lower cervical spine make higher (C1-C2 and odontoid) fractures likely.

Pre-existing illness

- The older patient may be slower or unable to generate an adequate physiological response to shock.
- Fluid resuscitation – administer 20ml/kg crystalloid fluid and observe the response, especially if the patient has a cardiac history.

Medications

- A combination of cardiac medication may blunt a patients response to trauma, masking the physiological signs of shock.
- Patients taking oral anticoagulants have a higher risk of significant ICH due to minor head injury, with a higher frequency of bleeding and severity. A lower threshold to CT scan these patients should be considered.
- A reduction in mortality of those with intracerebral haemorrhage is seen when the anticoagulation is rapidly reversed.

Management Considerations

Treatment orders

- Established Advance Care Plans should be integrated into management strategies. Patient centred care should aim to preserve or improve quality of life, not simply extend it.
- It is vital to consider the patients requests with relation to resuscitation as well as the possible futility of efforts. Early consultation with the patient and/or next of kin is essential to understand the patients' wishes.

ARV Adult Retrieval Victoria

1300 36 86 61 Statewide 24 hours

28/07/2017 | Version 1.0 | Not applicable to Paediatric patients | Contact us: Trauma.Victoria@ambulance.vic.gov.au

AMBULANCE VICTORIA