REGION I EMERGENCY MEDICAL SERVICES
STANDING MEDICAL ORDERS
EMT – Basic, EMT – Intermediate, EMT – Paramedic

SMO: Neck and Spinal Cord

Overview: In a trauma event that involves the neck and spinal cord, assessment, history to identify treatable injuries must be accomplished in a systematic way to facilitate appropriate and safe transport. Neck injuries can possibly include airway compromise, serious hemorrhage and/or spinal cord injury.

INFORMATION NEEDED

__ Mechanism of injury
__ Patient complaint

OBJECTIVE FINDINGS

__ Physical signs of trauma such as deformity, open wounds, swelling, airway obstruction, either partial or complete, abnormal voice sounds, difficulty breathing, ecchymosis, contusions, tenderness or crepitus
__ Glasgow Coma Scale
__ Neurological impairment or focal deficit (paralysis/paresthesias)
__ Mechanism of injury (fall, motor vehicle accident, battery, sports, etc.)

TREATMENT

__ Assess the scene for rescuer safety
__ Assess the patient's mental status (AVPU)
__ Assess the patient's airway and respiratory status
__ Apply supplemental oxygenation as determined by the patient's respiratory status. 2-6 LPM oxygen per nasal cannula or 10-15 LPM oxygen via non-rebreather mask
__ Assist ventilations as required by patient status with supplemental oxygen
__ At all times, maintain manual cervical spine control until the patient is fully immobilized into a short spinal immobilization device or onto a long spine board. The patient's head must be in a "neutral" position (nose up). If the patient's head is turned to the side and an airway compromise is determined to be resulting from that turned head, contact Medical Control to ask if you can move the head to a neutral position
__ Control hemorrhage with direct pressure being careful to not occlude normal blood flow through the carotid arteries and jugular veins
__ Stabilize impaled objects in the neck while they are in place. The only exception would be for impaled objects that are impairing the airway and those may be removed with approval of Medical Control
__ Cover all open wounds of the neck with a sterile dressing. It is possible that an open neck wound is allowing air into the tissues of the neck from an injured lower airway, so an occlusive dressing would be the best option in that instance
__ Assess the patient's distal neural function (legs, arms). Assess for motor and sensory function.
__ Assess the airway patency and respiratory status frequently

__ Be prepared to suction the patient as required. This will require the turning of the long spine board to the side so proper securing of the patient to the long spine board is essential

Documentation of adherence to protocol:

__ Mechanism of injury
__ Airway maneuvers undertaken
__ Spinal immobilization techniques used
__ Oxygen provided to the patient
__ Note any neural deficits and the time that they were found

Medical Control Contact Criteria

__ Contact Medical Control for any airway maintenance issues that you cannot control
__ Contact Medical Control prior to removing any impaled object in the neck that appears to be compromising the patient's airway
__ Contact Medical Control prior to moving the patient's head into a neutral position if the patient's head is turned to the side and that is compromising a patent airway

PRECAUTIONS AND COMMENTS

- There are no means for rescue personnel to determine if a spinal cord injury is present or not in the prehospital environment. Spinal column injury may be present that could impinge on the spinal cord and the spinal column injury very well may give no recognized warning signs of impending spinal cord injury. Therefore, a spinal cord injury will always be suspected based upon mechanism of injury and potential for spinal cord injury.