

**UMF Protocol**

**Aims**

Adapted basic care in a polytrauma patient with compressive pneumothorax.

**Initial medical evaluation**

Patient agitated

- GCS: 4, 6, 5

- Moist skin, piloerection

- Free airway, possible phonation

- Trachea deviated to the left

- Superficial, rapid breathing with accessory musculature

- Tympanism during percussion of the right hemithorax, subcutaneous emphysema

**Secondary medical evaluation**

Inspection

- Examination of the throat and thorax: trachea deviated to the left

- Respiratory pattern: right hemithorax not removable

- Palpation: subcutaneous crepitations,

- Percussion: tympanism

- Auscultation: respiratory silence on the right side

- Ultrasound: Bar-code pattern, sign of the stratosphere on the level of the hemithorax dr.

**Treatment**

- ABCDE assessment of the patient - PRIMARY EVALUATION

- Simultaneous maneuvers:

1. Basic monitoring: SpO2, TA, EKG

2. Venous pathway - at least 2 peripheral major venous catheters 14-18 G with initiation of volume resuscitation

3. Oxygen therapy - reservoir mask - FiO2 as close as possible to 100%.

A - Airway - with protection of the cervical spine (cervical collar)

- Patency of the airway

- Immobilisation maintained during the evaluation

B - Breathing- Ventilation and oxygenation

Supported:

- Administration of oxygen in large quantities

- Administration of analgesics

- Emergency decompression of pneumothorax, needle puncture in space 2 ic, medioclavicular or in space 5 ic on the midaxillary line under local anesthesia beforehand

**Establish the treatment plan for the next 24 hours**

1. State of consciousness
2. Pupils
3. Neck: assess the cervical spine, need to maintain cervical collar, Rx evaluation.

Evaluate the anterior part of the neck

1. Thorax: assess the chest, inspection, palpation, percussion, pulmonary auscultation and heart. Ultrasound and Rx.
* Thoracic drainage

Transport of the patient to the service of Rx

- Immobilization during transport

- Analgesia

**Remarks**

Differential diagnosis about the causes of acute respiratory insufficiency in polytrauma

**Expert references and recommendations**

ERC European resuscitation council guidelines for resuscitation 2015.Section 3. Adult advanced life support.

ERC - European resuscitation council guidelines for resuscitation 2015. Section 4. Cardiac arrest in special circumstances

SFAR - Société Française d’Anesthésie et de Réanimation

Advanced Trauma Life Support - American College of Surgeons

Textbook of Critical Care - J.L.Vincent et all., 2017, Elsevier