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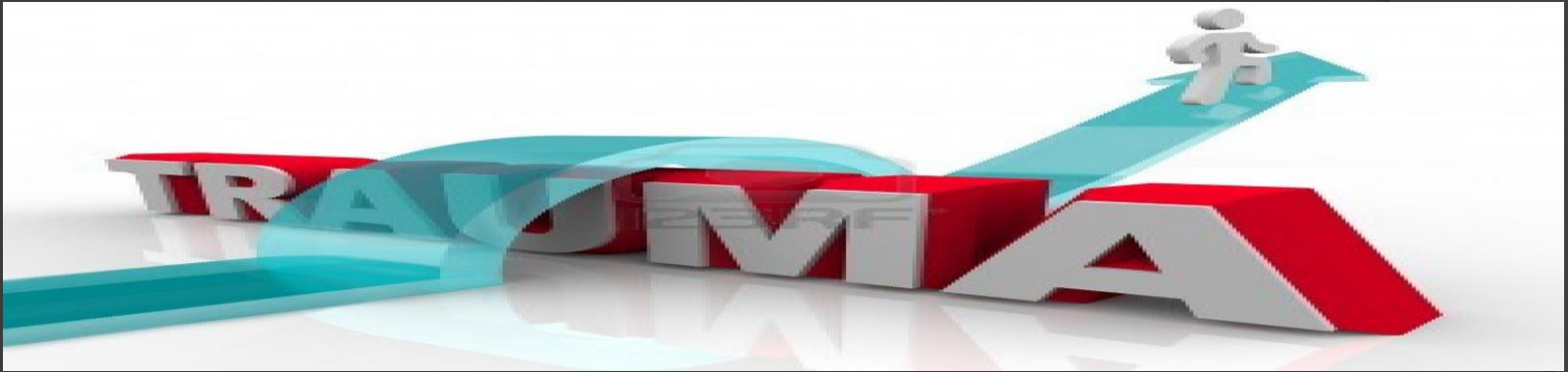
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HOFBURG CONGRESS CENTRE VIENNA



**PREHOSPITAL TRAUMA CARE:
NURSING INTERVENTION**
SPEAKER: SALVATORE CASILLO



- ◉ WHAT'S TRAUMA?
- ◉ NURSING ROLE IN TRAUMA MANAGEMENT
- ◉ RESCUE CHAIN
- ◉ NURSING INTERVENTION
- ◉ CONSIDERATION



Trauma is injury or damage to a biological organism caused by the sudden and damaging action of a physical harm from an external source.

It can be of mechanic, thermic, chemical and radioactive nature.

IN EUROPE



- is the leading cause of death for people under 45 years.
- is the fourth cause of death after cardiovascular, infectious and cancer diseases.
- the outcomes of trauma are significant in both economic and social terms

The trauma must be treated in a short time to obtain a considerable increase in survival, for this reason it must be treated:

RIGHT WAY



RIGHT TIME (GOLDEN HOUR)



RIGHT HOSPITAL



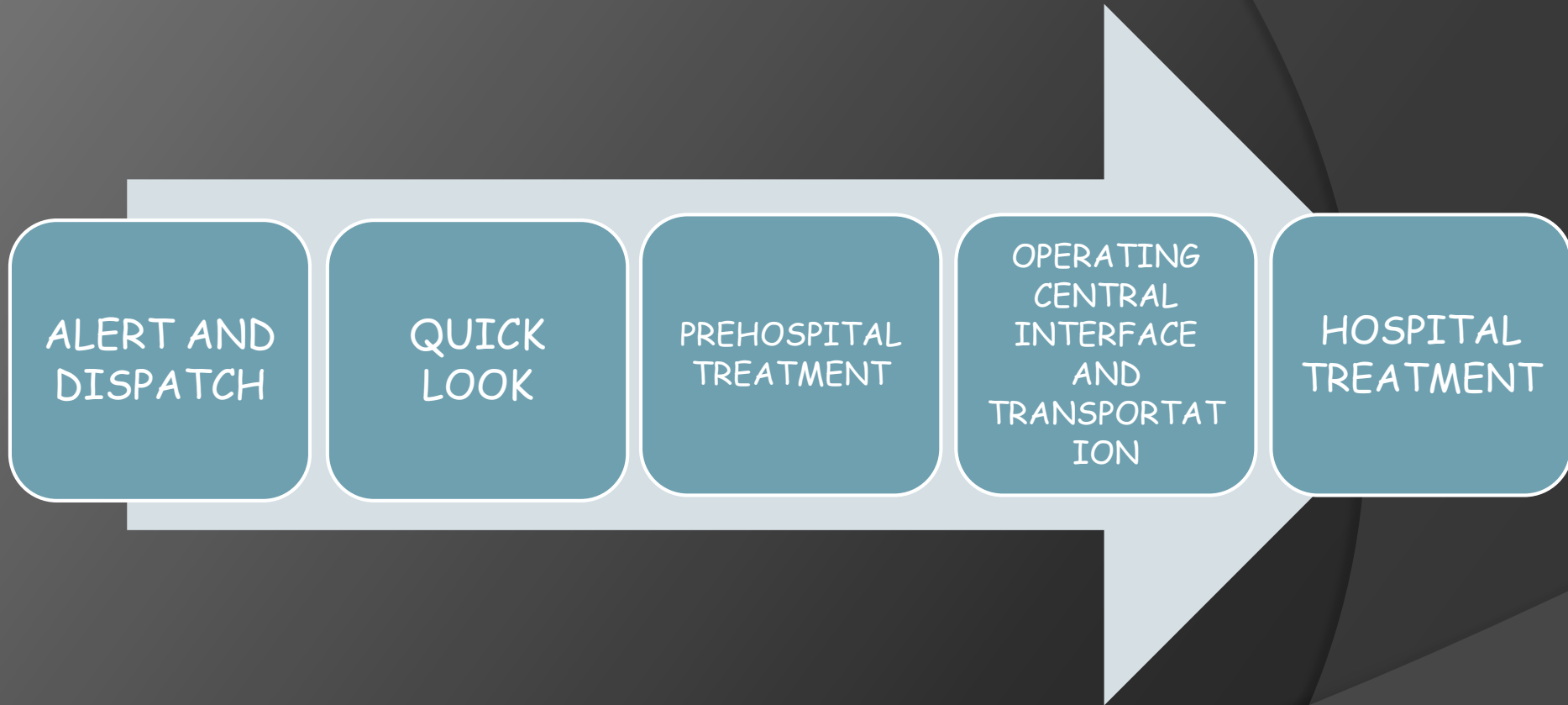
The role of Nurse in trauma management

Who is the nurse which provides first aid to the person injured?

- Specialized nurse: education, training and continue professional development
- Working in operating center (where is the call center) and on rescue vehicles BLS and ALS
- Working according to European protocols and guidelines



THE TRAUMA EMERGENCY CHAIN. WHO INTERVENES?



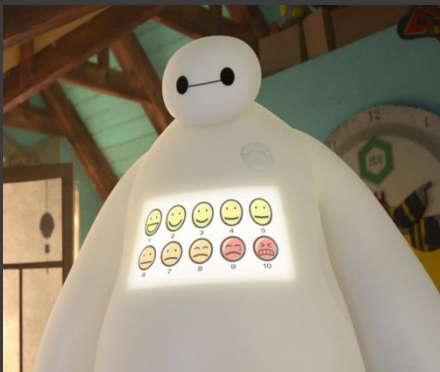
ALERT - DISPATCH:

THE NURSE who works at O.C. receives the call and, following a well-defined algorithm, decides what kind of vehicle send to the rescue



QUICK LOOK:

THE NURSE reaching the scene of the trauma, firstly conducts an early and quick assessment on the scene to ensure the safety for himself and for the patient, and then he makes a fast triage in order to communicate to the O.C. the eventual need for other rescue vehicles.

A blue square poster with a white crown at the top. Below the crown, the text "KEEP CALM AND TRIAGE" is written in white, bold, sans-serif capital letters, arranged in four lines: "KEEP", "CALM", "AND", and "TRIAGE".

KEEP
CALM
AND
TRIAGE

PRIMARY SURVEY:

THE NURSE performs a quick assessment of vital signs;



A AIRWAYS AND CERVICAL SPINE: AIRWAY PATENCY CONTROL, USE OF DEVICES DESIGNED TO ENSURE PATENCY, APPPOSITION OF THE CERVICAL COLLAR IN ALL TRAUMAS.

B BREATHING: WITH THE AIM OF AVOIDING HYPOXIA, HE ENSURE TISSUES OXYGENATION AND VENTILATION

C CIRCULATION: BP CONTROL, BLEEDING TAMPONADE, CHECKING THE PRESENCE OF PALLOR OR CYANOSIS

D DISABILITY: MENTAL STATUS ASSESSMENT (AVPU AND GCS)

E EXPOSURE: ASSESSMENT INJURIES TO THE DISTAL PARTS OF THE BODY, HYPOTHERMIA AND VITAL SIGNS MONITORING

The Evaluation and re-evaluation of these signs is always from A to E, never the contrary, if one phase becomes more critical it restarts to re-evaluate from the A. In this phase the nurse, always in contact with the O.C., chooses the strategy to be adopted before transport the patient: Scoop and run o Stay and play

It would seem that the two strategies are adopted on the basis of schools of thought:

SCOOP AND RUN is preferred by the Anglo-Saxons and the STAY AND PLAY by the Europeans.

In reality, the strategy should be chosen based on the patient and the trauma that we face

SCOOP AND RUN:

- PENETRATING TRAUMA AND / OR CRITICALLY ILL PATIENT WITH DETERIORATION IN HIS STATE OF HEALTH

- ALS NOT AVAILABLE

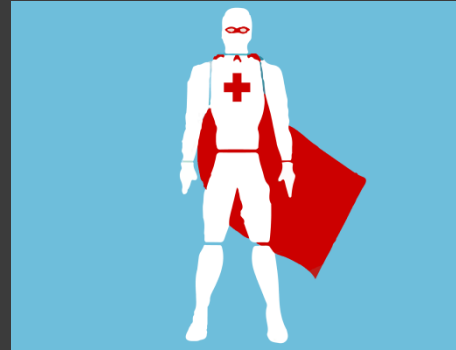
STAY AND PLAY:

- BLUNT TRAUMA OR COMPRESSIBLE INJURIES
- ALS AVAILABLE
- STABILIZATION ON SITE AND THEN TRANSPORT



When does the vehicle ALS intervene directly?

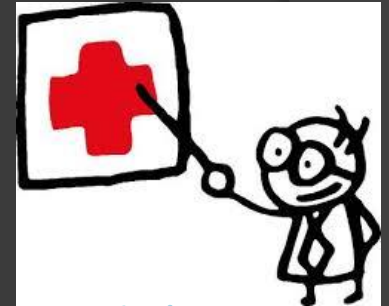
- Highway accident
- Car or motorcycle accident with ejection of the driver or passenger
- Car accident with lorry involvement
- Fall by 5 m
- Major workplace accidents



In other cases, is the BLS vehicle which intervenes, which in Italy is equipped with a crew of 2 nurses or 1 OSS (nurse helper) and 1 nurse. Therefore, the nurse is the first to arrive on the trauma scene, and you can already guess how much responsibility and importance has its role.

SECONDARY SURVEY:

THE NURSE, in order to direct the patient to the right hospital, considers:



- The dynamics of the event
- The Mechanism of injury
- The patient medical history (Anamnesis)
- Looking from the head to the feet for any other bleeding and / or fractures in order to proceed with the immobilization and subsequent transport to the hospital
- Continuing with the monitoring of vital parameters the nurse deals with the control of analgesia
- Using the correct device for the immobilization and the transport, in case he needs, the patient is loaded and brought to the right hospital in accordance with the O.C..

In Italy unfortunately, nurses cannot administer drugs of any kind in autonomy (even if usually they know which one is appropriate to use). The law provides that it is always the physician to make the prescription of medicines. However, in specific cases, like those relating to analgesia, protocols have been drafted and established to bypass the doctor's prescription.

Summarizing, therefore, nursing interventions in pre-hospital trauma include:

- Evaluation of the scene, security of the patients and the operators.
- Fast evaluation of vital functions and the type of trauma, decision makers (scoop and run or stay and play).
- Management of bleeding wounds, airway obstruction, patient ventilation.
- Direct collaboration with the O.C. and overall assessment of the ALS on the intervention (if not already present).
- Evaluation of the conditions that generated the trauma and patient history.
- Use of devices and drugs suitable for trauma treatment on site and during transport (Guedel canula, endotracheal tubes, spinal plates, spinal collars, KED, splints or depression mattress, opiates, painkillers, DAE and so on).
- Psychological and comfort support during the transport.



Any
question?



MANY THANKS,
SALVATORE CASILLO