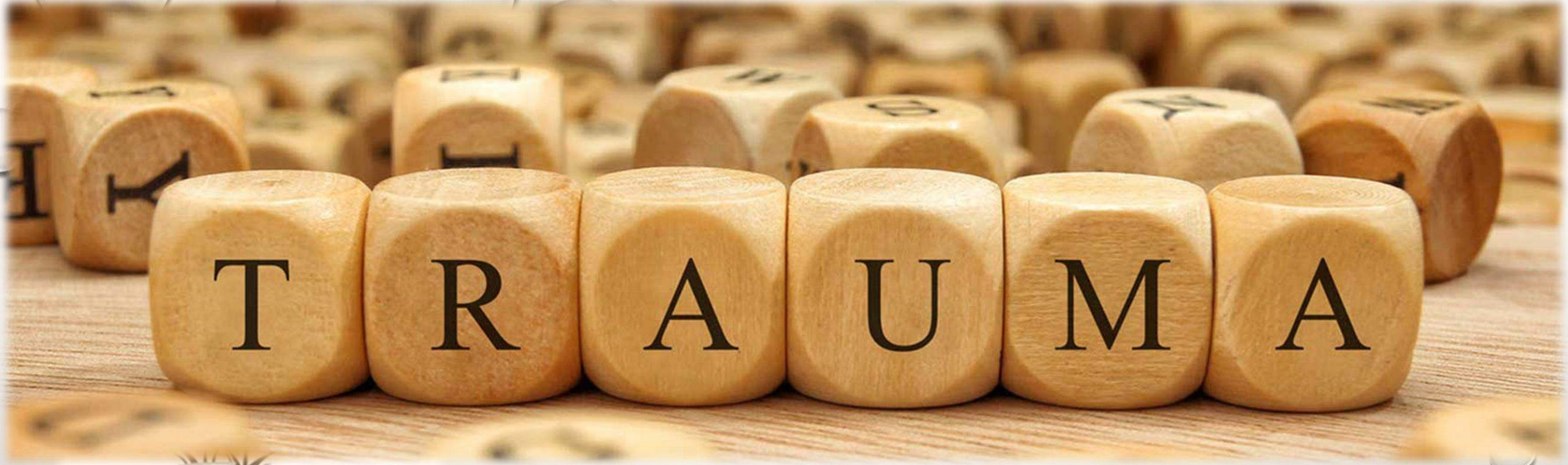




TRAUMA

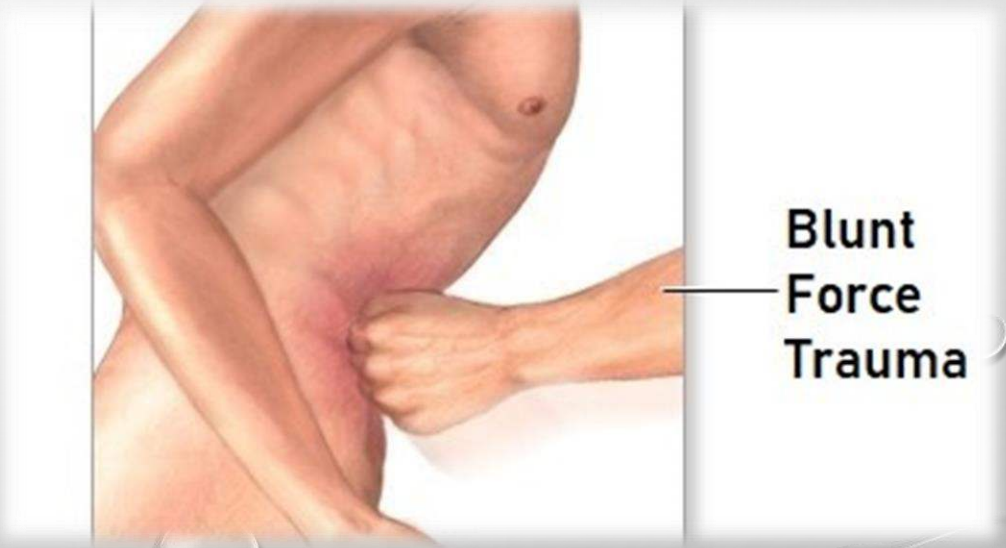
BY

DR. SAJJAD M ALHAKEEM

F.I.B.M.S (UROLOGY)

- TRAUMA IS A SERIOUS INJURY TO THE BODY. THE TWO MAIN TYPES OF PHYSICAL TRAUMA ARE:
- **BLUNT FORCE TRAUMA**: WHEN AN OBJECT OR FORCE STRIKES THE BODY, OFTEN RESULTING IN CONCUSSIONS, DEEP CUTS, OR BROKEN BONES.
- **PENETRATING TRAUMA**: WHEN AN OBJECT PIERCES THE SKIN OR BODY, USUALLY CREATING AN OPEN WOUND.





SUSPECT MAJOR TRAUMA IN

1. • HIGH SPEED ROAD COLLISIONS, VEHICLE EJECTION, ROLLOVER,.
2. • DEATH OF ANOTHER INDIVIDUAL IN THE SAME COLLISION.
3. • PEDESTRIANS THROWN UP OR RUN OVER BY A VEHICLE.
4. • FALLS OF MORE THAN 2 M.



ADVANCED TRAUMA LIFE SUPPORT (ATLS ®)

- THE ATLS CONCEPT WAS INTRODUCED BY THE AMERICAN COLLEGE OF SURGEONS IN AN ATTEMPT TO IMPROVE THE IMMEDIATE TREATMENT OF PATIENTS WITH SERIOUS INJURY.
- ACCORDING TO ATLS ® , TREATMENT OF ALL PATIENTS WITH MAJOR TRAUMA PASSES THROUGH THE SAME PHASES:

1. • PRIMARY SURVEY.
2. • RESUSCITATION PHASE.
3. • SECONDARY SURVEY.
4. • DEFINITIVE CARE PHASE.



PRIMARY SURVEY



- ON INITIAL RECEPTION OF A SERIOUSLY INJURED PATIENT, LIFE-THREATENING PROBLEMS SHOULD BE IDENTIFIED AND ADDRESSED AS RAPIDLY AS POSSIBLE.
- AN 'ABC' APPROACH IS ADOPTED, WITH EACH OF THE FOLLOWING ASPECTS BEING QUICKLY EVALUATED AND TREATED:
- A — AIRWAY MAINTENANCE WITH CERVICAL SPINE CONTROL.
- B — BREATHING AND VENTILATION.
- C — CIRCULATION AND HEMORRHAGE CONTROL.
- D — DISABILITY (RAPID ASSESSMENT OF NEUROLOGICAL STATUS).
- E — EXPOSURE (THE PATIENT IS COMPLETELY UNDRESSED TO ALLOW FULL EXAMINATION).

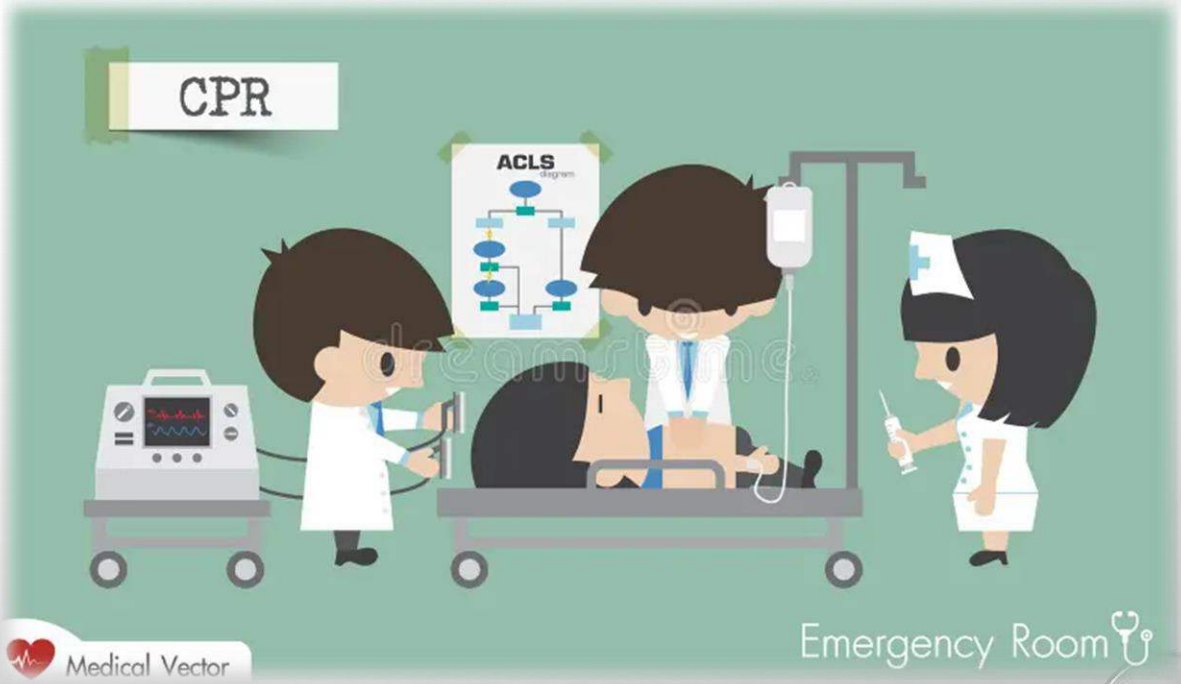
PRIMARY SURVEY



RESUSCITATION PHASE

DURING THIS PERIOD

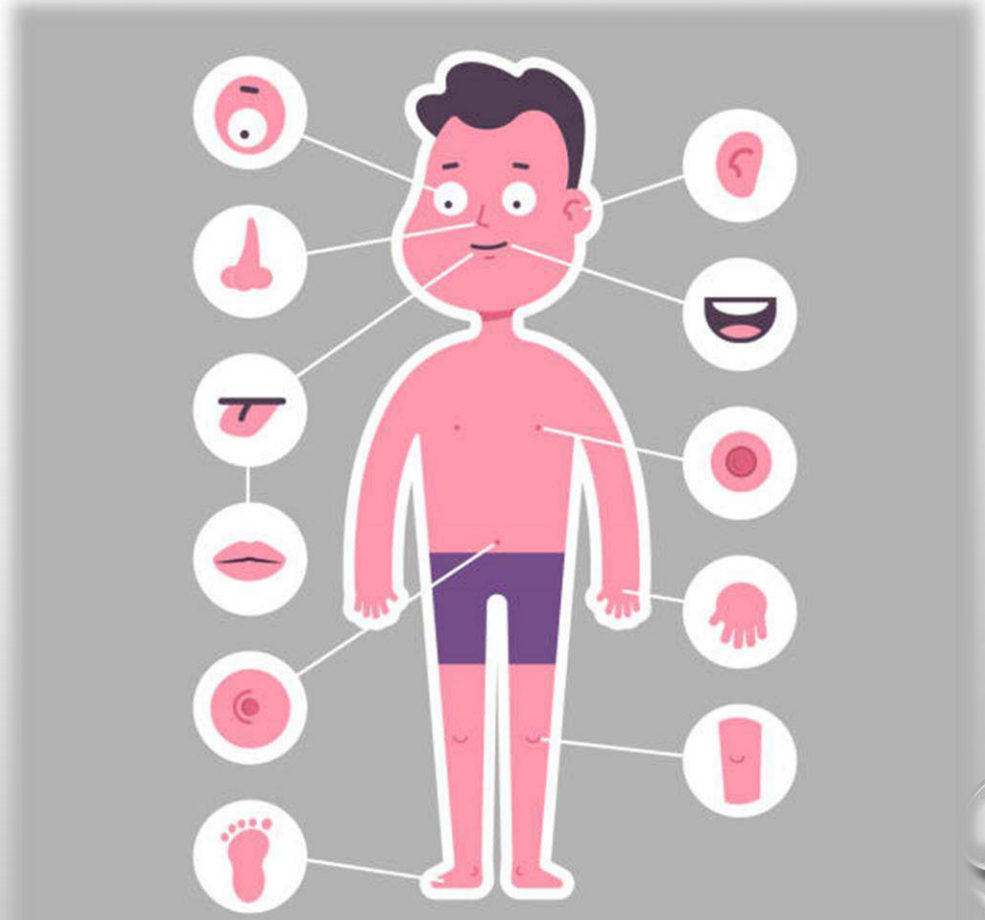
1. TREATMENT CONTINUES FOR THE PROBLEMS IDENTIFIED DURING THE PRIMARY SURVEY.
2. FURTHER PRACTICAL PROCEDURES (EG INSERTION OF ORO/NASOGASTRIC TUBE, CHEST DRAIN AND URINARY CATHETER) ARE PERFORMED.
3. OCCASIONALLY, IMMEDIATE SURGERY (DAMAGE CONTROL SURGERY) IS REQUIRED FOR HEMORRHAGE CONTROL BEFORE THE SECONDARY SURVEY.



SECONDARY SURVEY

- THIS IS A HEAD-TO-TOE EXAMINATION TO IDENTIFY OTHER INJURIES.
- SHOULD BE ACCOMPANIED BY RELEVANT IMAGING AND OTHER INVESTIGATIONS.
- MONITOR THE PATIENT CLOSELY — ANY DETERIORATION REQUIRES A REPEAT ABC ASSESSMENT.

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DEFINITIVE CARE PHASE

- THE EARLY MANAGEMENT OF ALL INJURIES IS ADDRESSED, INCLUDING FRACTURE
- STABILIZATION AND EMERGENCY OPERATIVE INTERVENTION.



INVESTIGATIONS IN MAJOR TRAUMA

- **BMG**
- THIS IS MANDATORY FOR ALL PATIENTS WITH MAJOR TRAUMA AND PARTICULARLY IMPORTANT ON ANY PATIENT WITH GCS<15/15.
- **SPO_2**
- ATTACH A PULSE OXIMETER ON ED ARRIVAL, THEN MONITOR CONTINUOUSLY.
- **BLOOD TESTS**
- CHECK U&E, FBC, AND GLUCOSE IN ALL PATIENTS.



- **X-RAYS**
- MULTIPLY INJURED PATIENTS OFTEN REQUIRE MULTIPLE X-RAYS.
- OBTAIN CXR AND PELVIC X-RAYS AS A MINIMUM



- **URINALYSIS**
- TEST THE URINE FOR BLOOD IF THERE IS SUSPICION OF ABDOMINAL INJURY.
- MICROSCOPIC HEMATURIA IS A USEFUL MARKER OF INTRA-ABDOMINAL INJURY.

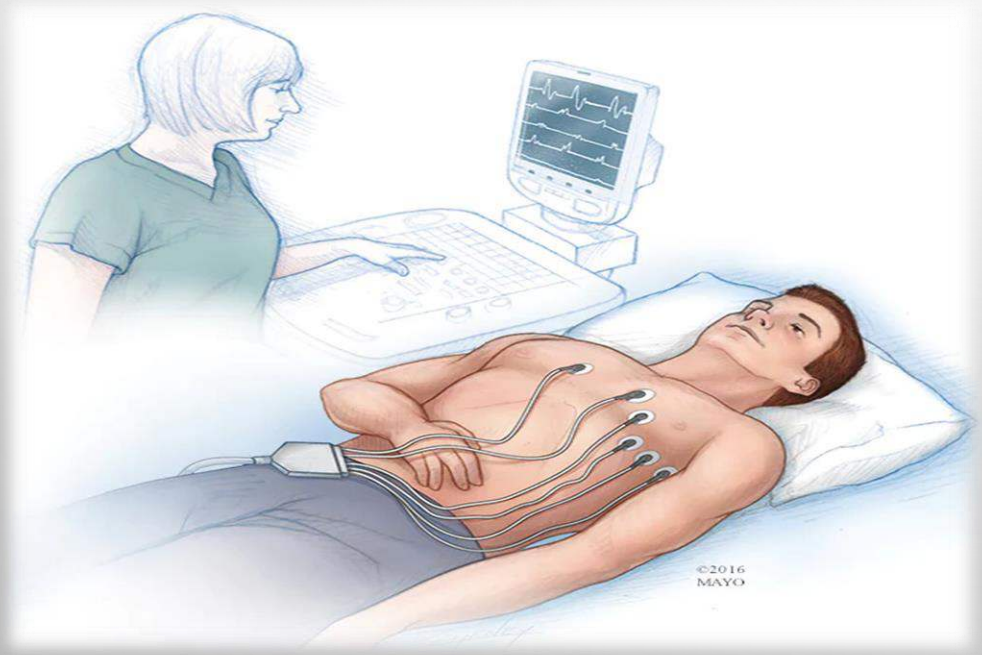


- **ARTERIAL BLOOD GAS**

PROVIDES USEFUL INFORMATION ABOUT THE DEGREE OF HYPOXIA, HYPOVENTILATION AND ACIDOSIS

- **ELECTROCARDIOGRAM**

MONITOR ALL PATIENTS; RECORD AN ECG IF > 50 YEARS OR SIGNIFICANT CHEST TRAUMA.





- **COMPUTED TOMOGRAPHY SCAN**

CT IS INCREASINGLY USED TO EVALUATE HEAD, NECK AND TRUNCAL INJURIES.



- **USS (FAST) AND DPL**

FOCUSED ASSESSMENT WITH SONOGRAPHY FOR TRAUMA IS A USS TECHNIQUE TO IDENTIFY FREE FLUID IN THE PERITONEAL OR PERICARDIAL CAVITIES.


THANK YOU!