

# PTC

## Primary Trauma Care

Dr. Mehdi Momeni

Associate professor of TUMS Shariati Hospital

# PTC System Summary

## **PTC** offers

- a systematic approach
- rapid assessment
- treatment of the injured patient

# PTC System

Prevention  
preparation

Triage

Primary survey

Secondary survey

Stabilisation

Transfer

Definitive care

- در يك تصادف رانندگی در نزدیکی بیمارستان جوان ۱۸ ساله‌ای از روی موتورسیکلت به جلو پرتاب شده و دچار آسیب شده است. بیمار توسط مردم به اورژانس آورده شده و بلافاصله وارد اتاق احیا شده است در بدو ورود، شما متوجه دفورمیتی شدید ساق پای چپ بیمار میشوید اولین اقدام شما چیست؟

# Primary Survey

- Rapid sequential
- Look 2 minutes
- Treat as you find
- Repeat if at any time unstable

# Primary Survey

- Airway
- Breathing
- Circulation
- Disability
- Exposure

# Primary Survey

- Airway maintenance with restriction of cervical spine motion
- Breathing and ventilation
- Circulation with hemorrhage control
- Disability(assessment of neurologic status)
- Exposure/Environmental control

# Airway

- First priority is a patent airway
- Talk to the patient
- Give oxygen (if available)
- Assess the airway
- Cervical spine



# Airway Beware

- Airway obstruction
- Chest injuries with
- Cervical spine injury

# Airway Assessment Signs Of Obstruction

- Snoring
- Stridor
- Agitation (hypoxia)
- Use of accessory muscles
- Cyanosis

# Airway Management

- Clear mouth
- Chin lift/jaw thrust
- Oropharyngeal airway
- Nasopharyngeal airway
- Endotracheal Intubation
- Cervical spine care

# Airway Maneuvers

**The Chin-Lift Maneuver to Establish an Airway.**



**The Jaw-Thrust Maneuver to Establish an Airway**



# Breathing Assessment

- Inspection (LOOK)
- Palpation (FEEL)
- Auscultation (LISTEN)

# Breathing Look

- Respiratory rate
- Accessory muscle use
- Cyanosis
- Penetrating injury
- Flail chest
- Sucking chest wound

# Breathing Feel

- Tracheal shift
- Rib fractures
- Subcutaneous emphysema
- Percussion

# Breathing Listen

- Breath sounds
- Heart sounds
- Bowel sounds



# Breathing Beware

- Tension pneumothorax
- Massive hemothorax
- Open pneumothorax
- Flail chest
- Lung contusion

# Breathing Management

- **Oxygen (if available)**
- **Artificial ventilation**
- **Decompress pneumothorax**
- **Drain haemothorax**

# Airway and Breathing

## summary

- Open the airway
- Consider intubation
- Do not forget cervical spine
- Oxygen if available
- Assist ventilation as required

# Circulation Assessment

- Cardiac output
- Blood volume
- External haemorrhage

# Circulation Assessment ( continue)

- Blood pressure
- Heart rate
- Capillary refill
- Peripheral temperature
- Peripheral colour
- External haemorrhage
- Pelvic examination
- Urine output

# Circulation Beware

- Intra-abdominal injury
- Intra-thoracic injury
- Long bone fracture
- Pelvic fracture
- Penetrating injury
- Scalp wounds

# Circulation Management

- Stop obvious bleeding
- Large bore intravenous access x 2
- Blood for crossmatch and Hb
- Administer IV fluid

# Circulation

## Summary

- Careful assessment
- Stop the bleeding
- Replace volume



# Disability (Neurologic Evaluation)

- patient's level of consciousness  
GCS or AVPU
- pupils  
size & reaction
- the presence of lateralizing signs  
determines spinal cord injury level

# Exposure

- Exposure and Environmental Control
- Undress for thorough assessment
- Prevent hypothermia

# Reassessment of ABCDE

If patient is, or becomes, unstable

# Adjuncts to the Primary Survey with Resuscitation

- continuous electrocardiography
- pulse oximetry
- arterial blood gas (ABG)
- urinary catheters
- Gastric catheters
- x-ray examinations (e.g., chest and pelvis)
- FAST
- DPL

# Secondary Survey

- Thorough head to toe examination
- On completion of primary survey
- When ABC's are stable
- Don't forget the back
- Aim to find any injury that may threaten life or limb
- Return to primary survey if any deterioration

Thanks for your attention

