

# BURNS

DEFINITION: *DESTRUCTION OF LIVE  
TISSUE DUE TO EXTENSIVE ACTION AN  
EXPOSURE TO HIGH  
TEMPERATURE(OVER 46<sub>DG</sub>C)*





- CAUSES-PHYSICAL AGENTS-HEAT(CAUSES TISSUE DESTRUCTION DUE TO EXCESSIVE PROTEIN DAMAGE)
  - -HOT LIQUIDS
  - -FLAME
  - -HOT SOLID SURFACES
  - -ELECTRICITY
  - -RADIATIONS
- CHEMICAL AGENTS-ACID OR BASE

## COMMON TYPES OF BURNS

**THERMAL (HEAT) BURNS:** Caused by fire, steam, hot objects or hot liquids.



**ELECTRICAL BURNS:** Caused by contact with lightening or electrical energy sources.



**CHEMICAL BURNS:** Caused by contact with industrial or household chemicals in either solid, liquid or gaseous forms.



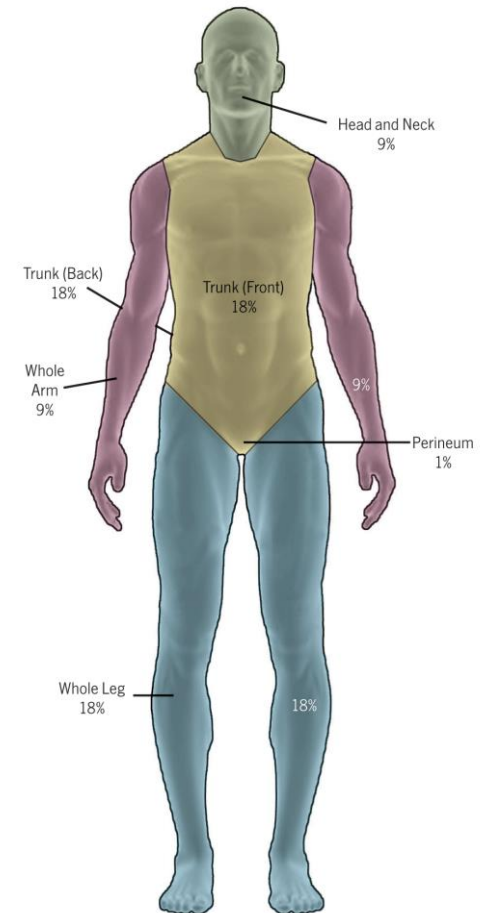
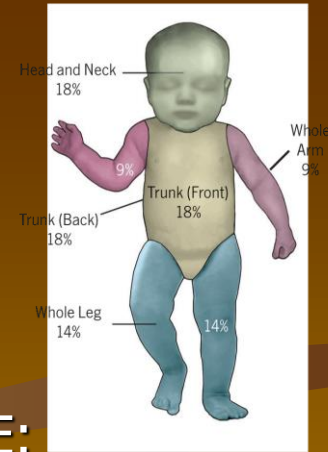
**RADIATION BURNS:** Caused by the sun, tanning, X-rays or during radiotherapy



## ■ GRAVITY FACTORS:

### ■ BURNED SURFACE-WALLACE'S "NINE" RULE:

- HEAD+NECK.....9%
- ARMS(L+R).....(2X)..9%
- ANT TRUNK.....18%
- POST.TRUNK.....18%
- GENITALIA.....1%
  
- TOTAL.....100%



## • DEGREE OF DEPTH

- DGR1-ERYTHEMA, EDEMA, PAIN-(SUNLIGHT)
- DGR2-LARGE BLEBS AND BULLAE WITH CLEAR LIQUID
- DGR3-HEMORRAGIC BLEBS-DESMIC SCAR-WOUND IS RED AND SOFT
- DGR4-BLACK DESMIC AND EPIDERMIC SCAR-PAINLESS(EXTENSIVE NECROSIS)



First degree



Second degree  
(superficial partial  
thickness)



Second degree  
(deep partial  
thickness)



Third degree  
(full thickness)



Fourth degree

# IMMEDIATE ATTITUDE

- 1-MAKE SURE YOU DO NOT EXPOSE YOURSELF!
- 2-DO NOT TRY TO GET BURNED CLOTHES OFF THE VICTIMS BODY(UNLESS LIQUID OR CHEMICAL)
- 3-RINGS-TAKE THEM OFF!-EDEMA MAY CAUSE REASON AF AMPUTATION!
- 4-COOLING WITH COLD WATER-10-15 MIN
- 5-COVERING THE BODY WITH SOFT,DRY,CLEAN
- 6-ANTALGICS
- 7-DO NOT APPLY ANY MEDICINE ON THE BURNER SURFACE!
- 8-DO NOT TOUCH THE BLISTERS OR BLEBS!



# BURNS OF FACE, MOUTH AND THROAT

- EXTREMELY DANGEROUS DUE TO THE FACT THAT THE EDEMA MAY CAUSE OBSTRUCTION OF AIRWAYS

## IMMEDIATE ATTITUDE

- 112!
- HYPEREXTENSION OF THE HEAD!
- CPR!





# ELECTRICAL BURNS

- CAUSED BY PASSING OF ELECTRICITY THROUGH THE BODY
- “ENTRY” AND “EXIT” MARKS
- EMERGENCY ATTITUDE
- *1-IF VICTIM IS STILL UNDER INFLUENCE OF LOW INTENSITY ELECTRICITY-DISCONNECTION FROM THE SOURCE!!!DO NOT USE MATERIAL THAT CONDUCTS ELECTRICITY!!!WOOD OR PLASTIC!DO NOT TOUCH THE PATIENT’S SKIN!!*
- *2-112!*
- *3-APPLY CURRENT MEASURES IN BURNS!SEE ABOVE!*





# CHEMICAL BURNS



- -WHAT SUBSTANCE WAS THE CAUSE?
- IMMEDIATE ATTITUDE:
- -112
- -WASH THE AFFECTED ZONE WITH LOTS OF COOL WATER! USE GLOVES!
- -REMOVAL OF ALL CLOTHES!



# First degree burns



# Second degree burns





# Third degree burns



# Fourth degree burns





# HEART ATTACK

- DEFINITION: ANY ACUTE SIGN OF PAIN IN THE HEART REGION
- CHARACTERISTIC EITHER FOR PATIENTS WITH KNOWN CARDIAC PROBLEMS (ISCHEMIC CARDIOPATHY, ANGINA, INFARCTUS)
- MAY OCCUR TO PEOPLE AS A FIRST AND SINGLE SIGN



- CAUSES: OBSTRUCTION OF BLOOD FLOW DUE TO A CLOT IN THE BLOOD VESSEL- DAMAGING OF NORMAL IRRIGATION OF A SEGMENT OF THE HEART MUSCLE (MYOCARD)- ISCHEMIA- PAIN
- HEART DISEASES ARE THE MOST PRINCIPAL CAUSES OF DEATH ALL OVER THE WORLD!





## TYPICAL PAIN

- -ONSET MAY BE PRECEDED BY A STATUS OF DISCOMFORT
- MAY APPEAR SUDDEN, NO WARNING!
- MAXIMUM PAIN ZONE IS THE HEART ZONE-"CLAW" "KNIFE STAB"
- IRRADIATION OF PAIN IN THE LEFT JAW, NECK, LEFT HAND, LEFT LITTLE FINGER TIP

# UNTYPICAL PAIN

- -IN THE EPIGASTRIC REGION
- -IN THE BACK
- -

NAUSEA,VOMITING,VERTIGO,DYSPNOEA,  
AGITATION,FEAR OF DYING,LACK OF  
AIR



# IMMEDIATE ATTITUDE

- 1 PATIENT MUST BE CALMED AND PUT TO COMPLETE REST!IN BED,WITH A PILLOW UNDER TNE HEAD AND ONE UNDER THE KNEES;LOOSENING OF BUTTONS,TIE,BELT;OPEN WINDOWS;REMOVAL OF ENTOURAGE
- 112!
- ADMINISTRATION OF MEDICINE-aspirin-300mg
- -antalgic
- -Nytroglicerin 1 cp
- Continous observation
- Cpr!

