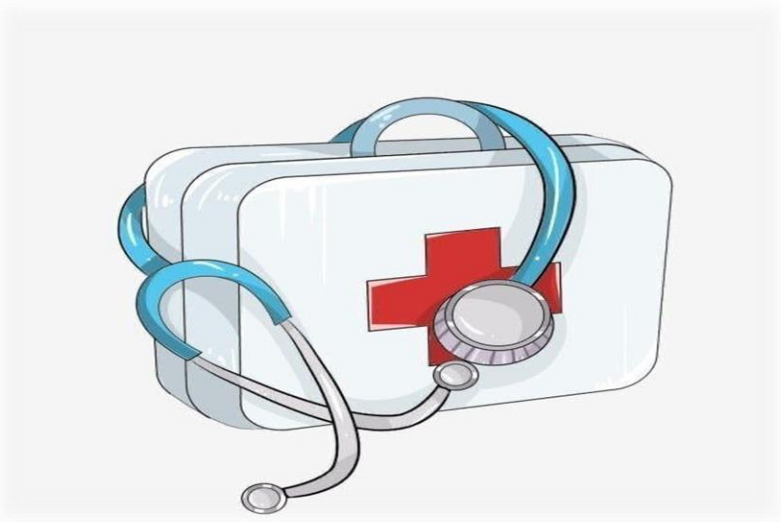
Al-furat Al-Awsat Technical University
Kufa Technical institute
Medical Lab Tech .Department.

Fundamental of Nursing



2025-2026

Lectuer :Ali-K.Mateb

Nursing

Is the art and science and spiritual in the giving of healthy nursing to help people to be agood status and prevent illness .

Nurse:

The person who has complet aporgram of basic nursing education for help the patient assisting individuals to maintain optimum healthy and heal from birth to old age

Role of nurse

1- Give assisting individual to families and communities attain, recover and maintain optimum health and function
2- Examination for all parts of the body to diagnosis any disease or any effecte to person e.g (bleeding, coma, breakdown from Altitute …) Include eyes. nose. mouth . abdominal . neck .chest .brest . extremities . arm and feel ……

.

Aim of nursing

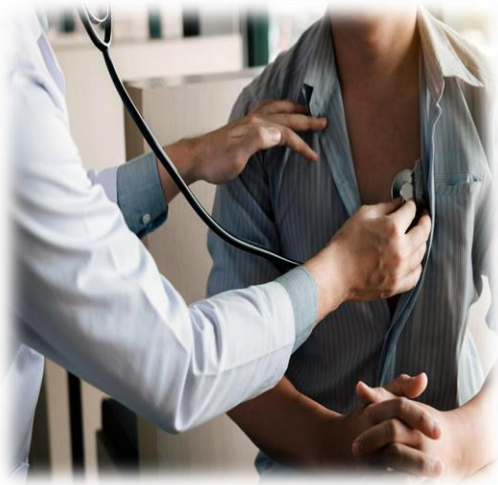
1- To promote healthy of patient .
2- To protactive from any disease .
3- To restor healthy .
4- To facilitate coping with disability or death .

First Aid

Is the process which give nurse deliver care who required assistance to the injured person in cases of emergency and accidents during the first minutes before his arrival at the hospital to achieve healthy to prevent death or any abnormal condition .

Physical Examination

The physical examination can be performed by the doctor or nureing or physical assistant to all parts of patient to detect any disease .




Types method of physical examination

1- Inspection method.

The exam should include used eyes to see

Color of skin

- Shape of body

2- Palpation method

In this method mesrure the

- - Temperture

-Pules.

3- Accultation method

in this method used astethoscope to listening to the

voices of the

- Heart beat .
- Abdominal .
- Respiration .

4-Percussion method

This method used hand and finger2

5- Manipulation method

This method used eyes to the patient

-see movement of arm and feet or any part of body

Purposes of performind aphysical examination

1-To determine the patient level of healthy 0r physical function .

2- To arriver atentative diagnosis when there is healthy problem or disease .
3- To confirm diagnosis of disease or dys function .
4- To evalution the effectiveness of prescribed medical treatment and therapy .

Vital Signs

are measurements of the bodys most basic function.

The 4 main vital signs include

Body temperature .
1- Pulse rate .
2- Respiration (breathing) .
3- Blood Pressure .

Supplies Needed to Check Vital Signs

1- Thermometer
2- Stethoscope
3- Blood pressure cuff with sphygmomanometer
4- Watch
5- Disinfectant wipes and gloves

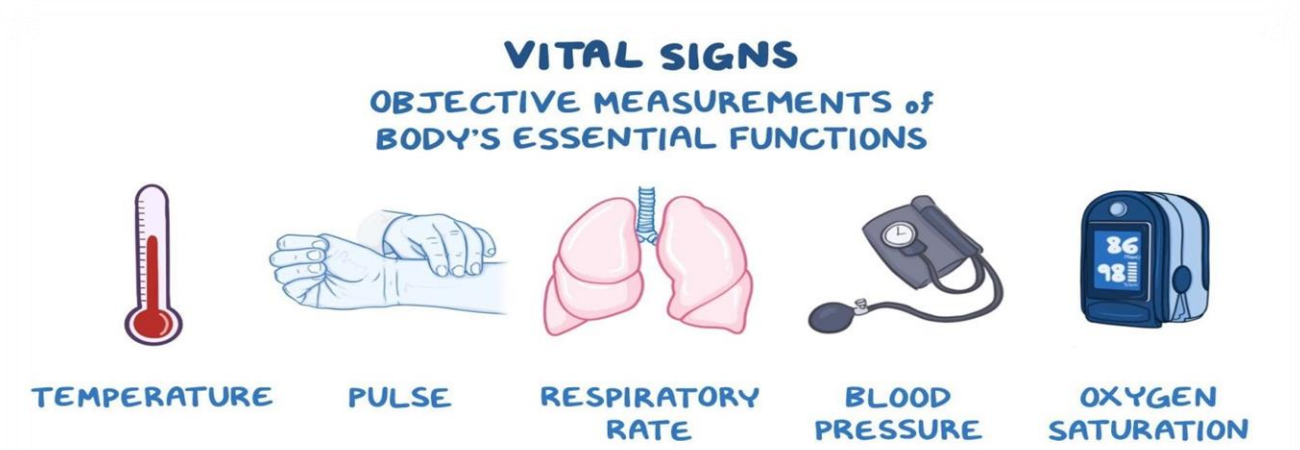


Table 1. **Vital signs: normal values in adults**	
Temperature	37°C
Heart rate	60-99 beats per minute
Pulse	60-99 beats per minute
Blood pressure	120/80mmHg
Respiratory rate	12-16 breaths per minute
Oxygen saturation	95-100%
pH	7.3-7.5

DRSABCD action plan

Danger

Assess danger.
Ensure that your surroundings are safe to assist the patient.

Reponse

Check for patient's responses. Ask for names, squeeze shoulders.
Yes: Make comfortable, check injuries
No: Send for help

Send

Call triple zero (000) for ambulance.
Seek help from people around.
Provide details about the situation and location

Airway

Open patient's mouth and check for foreign material

Yes: Place patient in recovery position. Clear airway with fingers
No: Leave on back. Tilting head with chin lift to open airway

Breathing

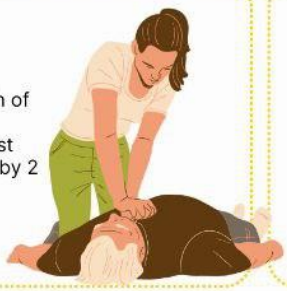
Check for breathing. Look, listen and feel for breathing for about 10 seconds.

Yes: Place in recovery position, monitor breathing and responsiveness
No: Place on back and perform CPR

CPR

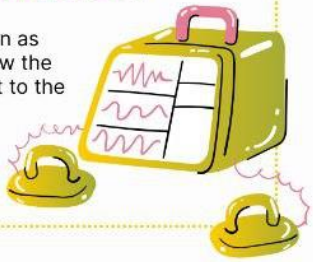
Press down 1/3 of depth of chest
Give the patient 30 chest compressions followed by 2 breaths.
Repeat until:

- Ambulance arrives
- Casulaty recovers



Defibrillation

Apply AED as soon as possible and follow the prompts. Attach it to the victim's chest.



Approved third party provider of the firstaid group

B.L.S First Aid Training

Body temperature

Is the balance between produced and heat lost of the body .

Temperture are often measure in degrees Celsius or Fahrenheit.
Normal ranges of temperature

36.5----- 37.5 C

97.6 ---- 99.6 F

The heat – regulating center in the brain called Hypothalamus

Thermometer
Is an instrument that measures body temperature

Types of Thermometers

1- Digital thermometer (Electronic)
2- Glass thermometer (Mercury)
3- Temporal thermometer(Electronic)
4- Tympanic membrane thermometer (Electronic)
5- Paper thermometer 6- Electric thermometer .

Sites for measurement of body temperature

1- Mouth (Oral) **37C (3—5 mints)**
2- Armpit (axillary) **36C +0.5C (10 mints)**
3- Forehead (tempotal)
4- Rectum (rectal) **37C + 0.5 C (2—3 mints) accurate reading**
5- Ear (tympanic) **1 mint**

Times vital sings ;assess

1- Change in healthy status .
2- Admission the patient to healthy care agency .
3- Nursing of medical order .
4- Befor or after surgery or diagnosis procedure .
5- Befor and after administration of medication .
6- Befor and after any nursing intervention .

Assassing(procedure) Body Temperture

1- Explaino to the peron what you are going to do
2- Perform hand hygiene (Wash hand)
3- Provide client privacy
4- Preparing the equipments
5- Placthe thermometer and wait the appropriats amount of time .
6- Remove and read the temperature . record it on work sheet and write of measurement .
7- Wash or Wipe the thermometer if necessary and return it to the storage location






Contrainications of Oral thermometer

1- The child under 6 years
2- Unconscious patient
3- Psychiatirc patient
4- Patient who cannot breath from nose
5- Mouth surgery or infection
6- Patient on oxygen mask

Contraindication of Rectal thermometer

1- Rectal surgery
2- Rectal disorder (Hemorrhage rectal tissue ….ect)
3- Diarrhea

Methods of cleaning and disinfectionting medical thermometers

Material used

1- Washing powder
2- Disinfectant solution consisng of 1% powder and 99% alcohol with an alcohol concentation of 70%
3- Alided container used for clean thermometer
4- Gauze pade placed in the bottom of aclean thermometer jar
5- Small, round pieces of cotton
6- Paper trash bag

Action steps (procedure of washing thermometer)

1- Wash with and washing powder to dissolve the grease stuck to the heaters and prevent microbes from growing underneath them .
2- Wipe the thermometer with acotton ball in a circular motion from the stem to the bulb .
3- Clean the thermometer with running water to remove germs
4- Dry the thermometers
5- Place in the disinfectant
6- Remove the thermometer from the disinfectant and wash them with running water
7- Put it in its own container.

Pulse

IS the expansion of the arterial wall occurring awve of blood created by contraction of the left ventrical of the heart .

Normal range

60---- 100 times per minte

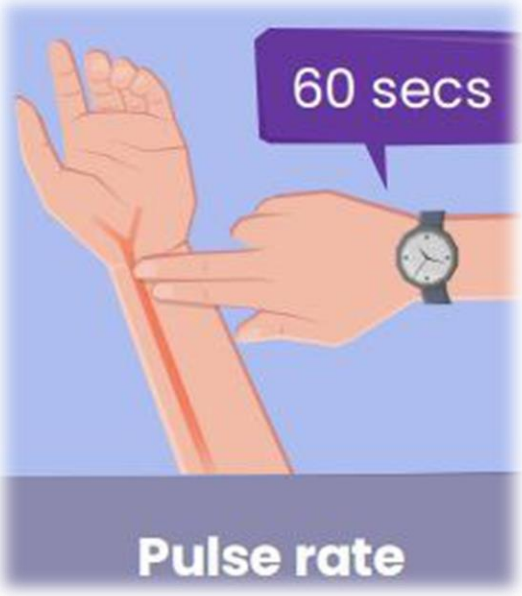
Tachycardia ..when pulse rate more than ***100 times per minte*** .

Bradycardia ..when pulse rate ***less than 60 times per minte***.

Arrhythmia ; irregular pulse rhythm .

Characteristies of the pulse

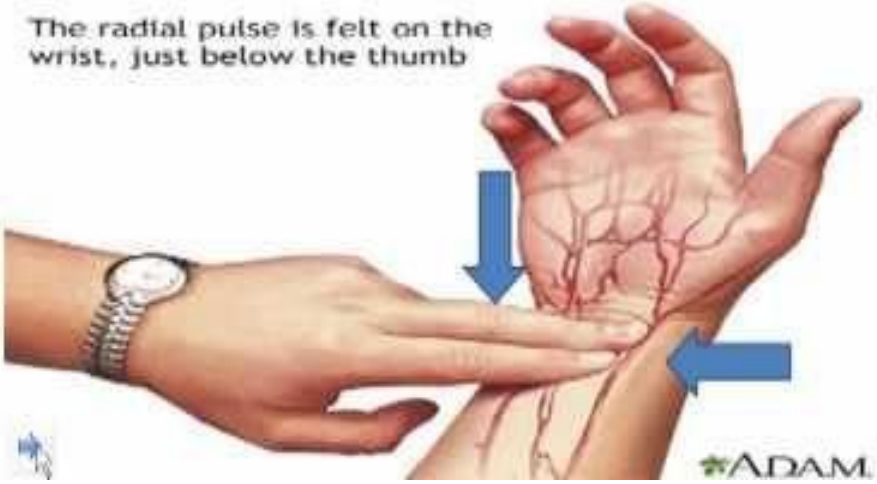
1-Rate of frequency ; refers to the number of pulsation per minte.
2-Rhythm ; refers to the regularity with which pulsation occurs
3-Quality ; refers to the strength of the palpated puisation



Instructions to take a Radial Pulse

Step 1

Place the index and middle fingers at the base of the thumb, and slide down about 2 cm in the groove in the wrist, pressing lightly.



Factors affecting pulse rate

1- Sleeping ;pulse rate morning lowest than afternoon.
2- Sex ; female is faster about (7—8) beat/ minute than male.
3- Age ; infant higher than adult.
   - Infant 120—130 beat / minute
   - Adult 60—120 bear / minute

   4-Body fluid ; body size and build may affect pulse rates
   - Thin and long body ……..low pulse
   - Fat and small body …….. high pulse

5-Blood pressure ; low blood pressure increase pules than high blood pressure decrease pules

7- Body temperature ; increase temperature lead to high pulse
8- Exercise.
9- Stress
10- Bleeding
11- Thyroid gland disturbances
12- Some medication as (adrenalin , aminophylline)

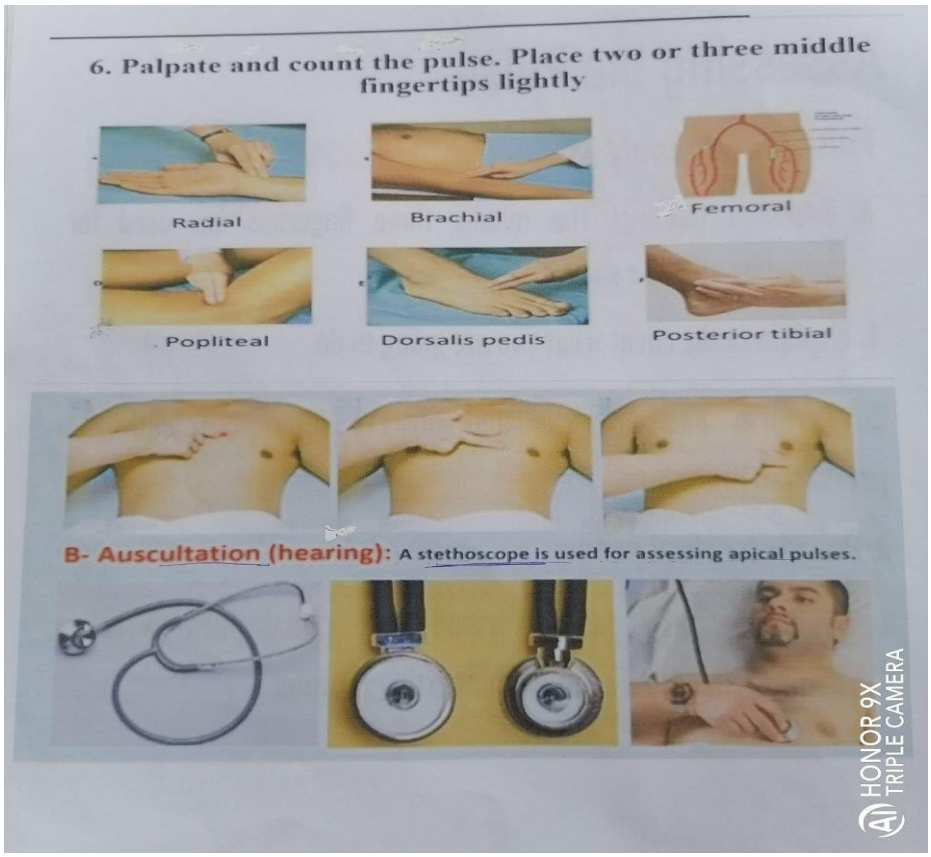
Sites of checking pulse

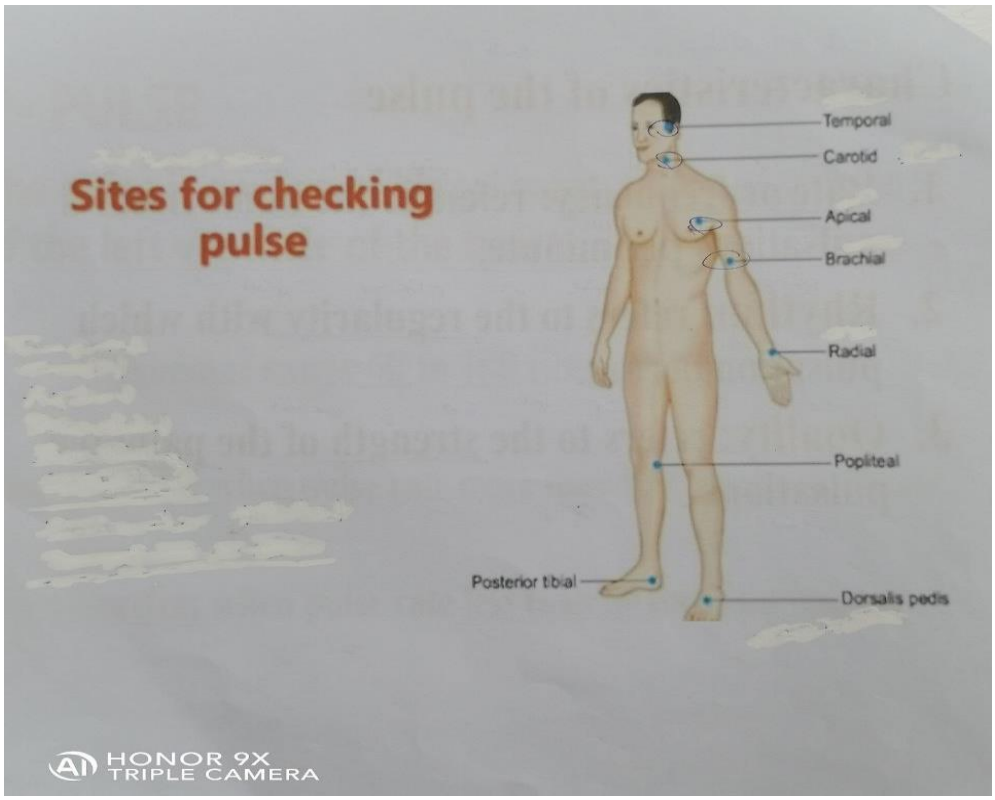
1- Radial artery
2- Temporal artery
3- Carotid artery
4- Facial artery
5- Femoral artery
6- Posterior tibia artery
7- Dorsal artery
8- Brachial artery
9- Apical artery

Assessing (procedure) the pulse

1- Palpating (feeling) the middle three fingers are used for palpating pulse sites .
2- Explan to the elient what you are going to do
3- Perform hand hygiene and observe appropriate infection prevention procedure
4- Select the pulse point .normally the radial pluse is taken .
5- Assist the elient to acomfortable resting position .
6- Palpate and count the pulse .place two or three middle finger tipe lightly.

7-Auscultation (hearling) used Astethoscope for assessing apical pulses


6. Palpate and count the pulse. Place two or three middle fingertips lightly
Radial
Brachial
Femoral
Popliteal
Dorsalis pedis
Posterior tibial
B- Auscultation (hearing): A stethoscope is used for assessing apical pulses.
HONOR 9X
TRIPLE CAMERA


Sites for checking pulse
Temporal
Carotid
Apical
Brachial
Radial
Popliteal
Posterior tibial
Dorsalis pedis
HONOR 9X
TRIPLE CAMERA

Respiration

Is the process to number of breaths aperson takes per/ minute by which oxygen and dioxide are interchanged .

Normal range ; 12----20 breath / minute

- Inhalation or inspiration ; refers to the intake of air in to the lungs .
- Exhalation or expiration ; refers to breathing out or the movement of gases from the lungs to the atmosphere .

Control of respiration ,located in the Medulla oblongata .

Types of Respiration

1- External respiration ;
Is providing oxygen to the blood and removal carbon dioxide from the blood .
2- Internal respiration ;
Is providing oxygen that is in the blood to the cells in the body and removal of carbon dioxide from the tissue to the blood .

Types methods of Rsepiration

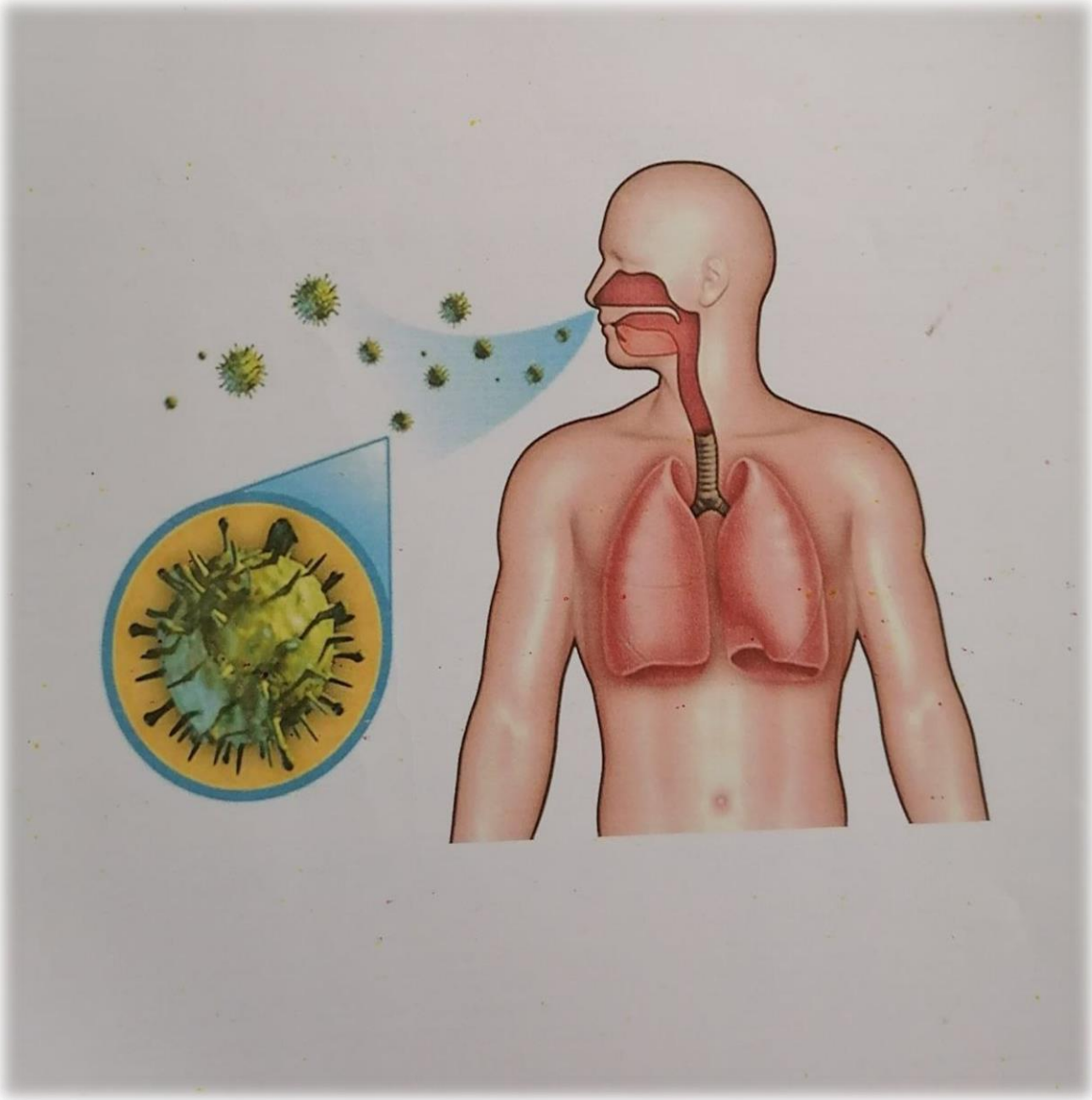
1- Inspection method
2- Listening with stethoscope .
3- Monitoring arterial blood gas result.
4- Using pulse oximeter .

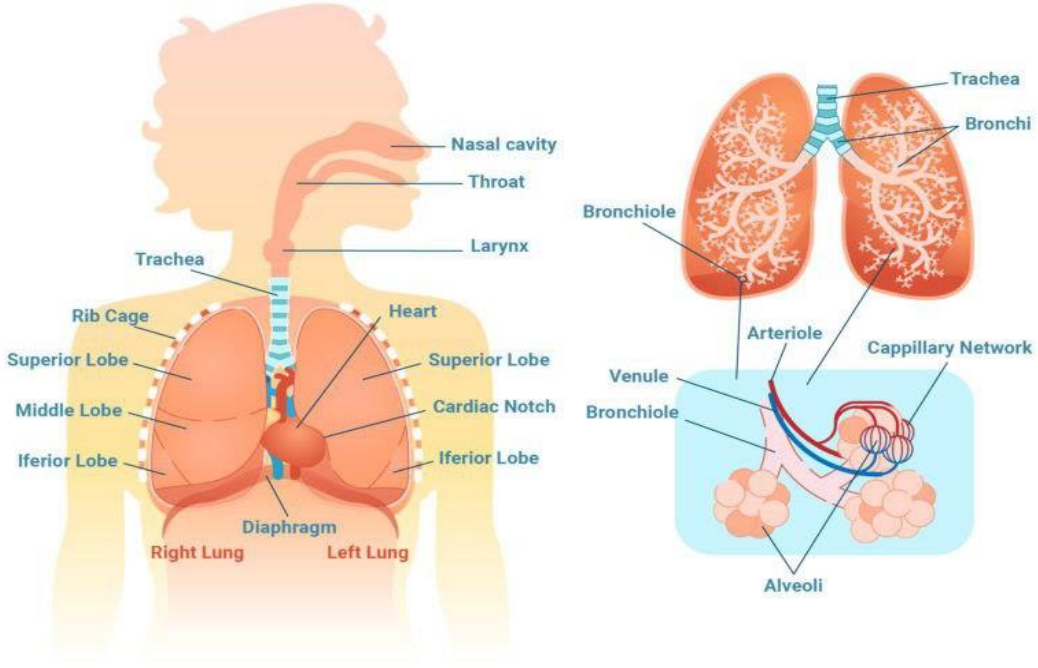
Respiratory diseases

Respiratory diseases are divided in to two main parts

1- Viral and bacterial diseases ex pneumonia

2- Chronic diseases such as asthma & chronic obstructive pulmonary diseases .





Respiration Characteristic

1-Respiration rate (Normal (Eupnea) , Tachypnea (Polynea) , Bradypnea (Hypernea) Dypnea(difficult breathing) , Stertorous (breath with sound))

2-Respiration depth (Normal , Shallow , Depth)

3-Rhythm respiration (regular, irregular)

Assessing (procedure) Respiration

Perform the respiratory assessment without patient (client) being aware that you are doing

1- Position patient in sitting or supine position with head elevated at 45—60 degree
2- Keep your fingers over the wrist as if checking pulse
3- Observe one complete respiratory eyes ---inspiration ana expiration
4- Count respiration for one whole minute and record the findings.

Blood Pressure

Is the force that blood exerts against the walls of the blood vessels .

Systolic pressure ; - is the pressure of the blood as a result of contraction of the ventricles .

Diastolic pressure ;- is the pressure when the ventricles are at rest .

Blood pressure is measured in millimeters of mercury (mmhg)

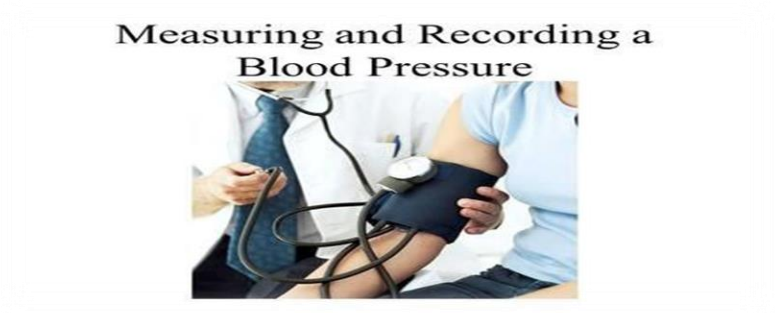
Normal range

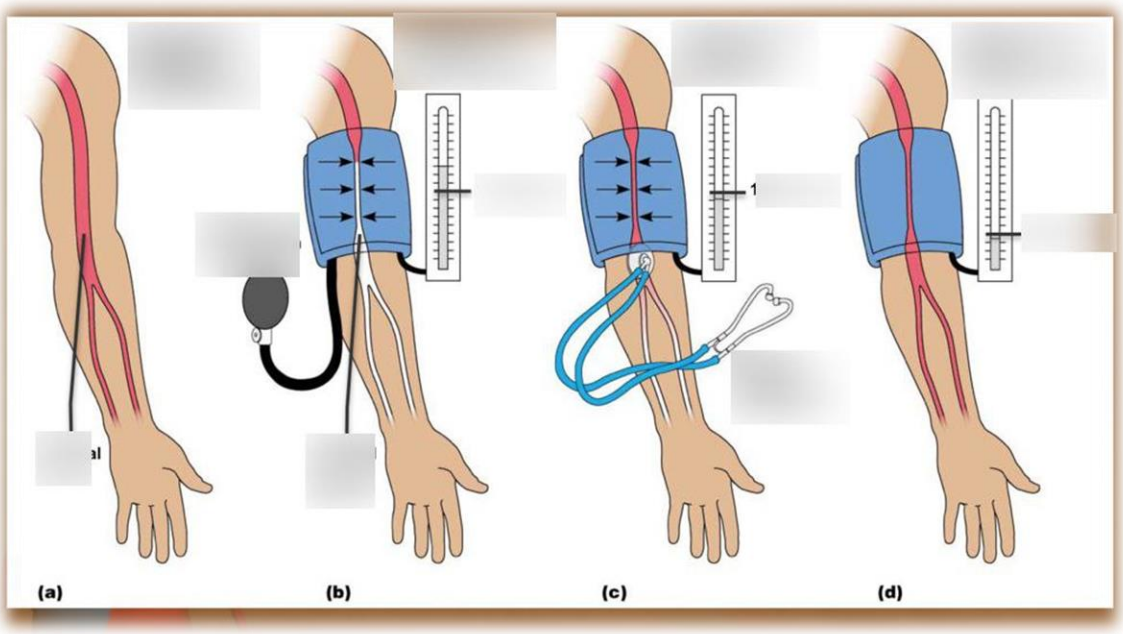
120/80 mmHg

- Hypertension ;- is ablood pressure that upper than normal .
- Hypotension ;- is ablood pressure that below normal .

Material required

1- Sphygmomanometer and stethoscope.
2- Doppler ultra sound .
3- Electronic or digital instrument .




(a)
(b)
(c)
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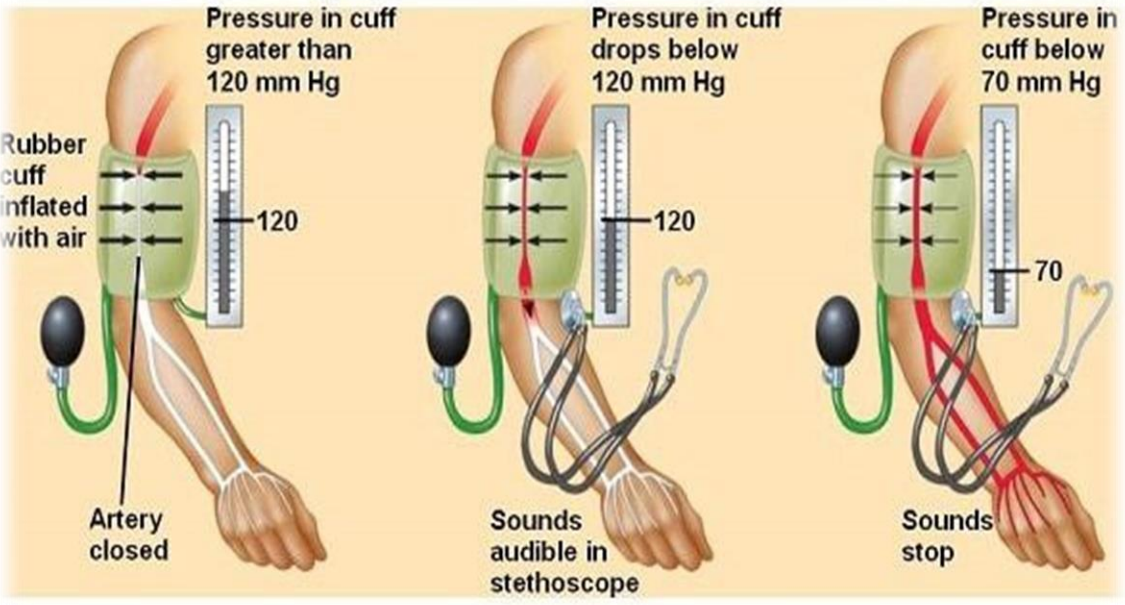

Pressure in cuff greater than 120 mm Hg
Rubber cuff inflated with air
120
Artery closed
Pressure in cuff drops below 120 mm Hg
120
Sounds audible in stethoscope
Pressure in cuff below 70 mm Hg
70
Sounds stop

Assessing (procdure) blood pressure

1-Wash hand ; identify patient procedure to patient . assist patient to comfortable position with for arm supported at heart level and palm up .
2-Expose the upper arm completly .
3-Wrap deflatd cuff around upper arm with center of bladder over brachial artery . lowr border of cuff should be about 2cm above ante cubital space .
4-Palpate brachial or radial artery with finger tips . Close valve on pressure bulb and inflate cuff until pulse dis a ppears .
5-Fully deflate cuff and wait 1 to 2 minuts .
6-Place stethoscope ear piece in ear. Re palpate the brachial artery and place stethoscope bell .
7-Close bulb valve by turning clock wise . Inflate cuff to 30mmHg above reading where brachial pulse dis appear .
8-Slowly release valve so pressure drop about 2 to 3 mmHg per secound .
9-Identify monometer reading when first clear korotkokk sound is heart .
10-Continue to deflate,and note reading when sound muffles and when it dis appears .
11-Deflate cuff completely and remove from patients arm .
12-Record blood pressure. Record systolic (e.g 130) and diastolic (e.g 80) in the form 138/80 .

Factors affect (increase) blood pressure

1-Age increase
2-Exercise
3-Food in take
4-Medication
5-Illness (disease)
6-Obese person.
7-Tension (stress)
8-Sex person

Factors maintaining normal arterial pressure

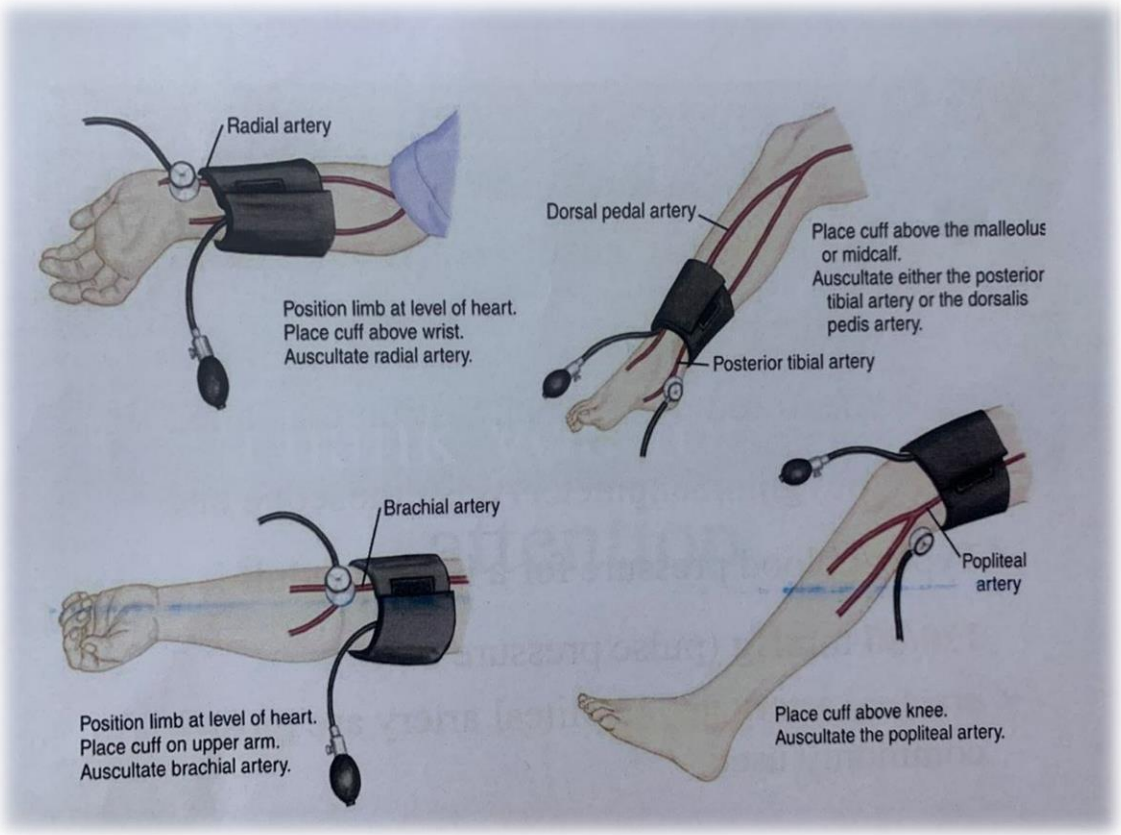
1-perpheral resistance .
2-The quantity of blood .
3-The viscosity of blood .
4- The elasticity of vessel wells .

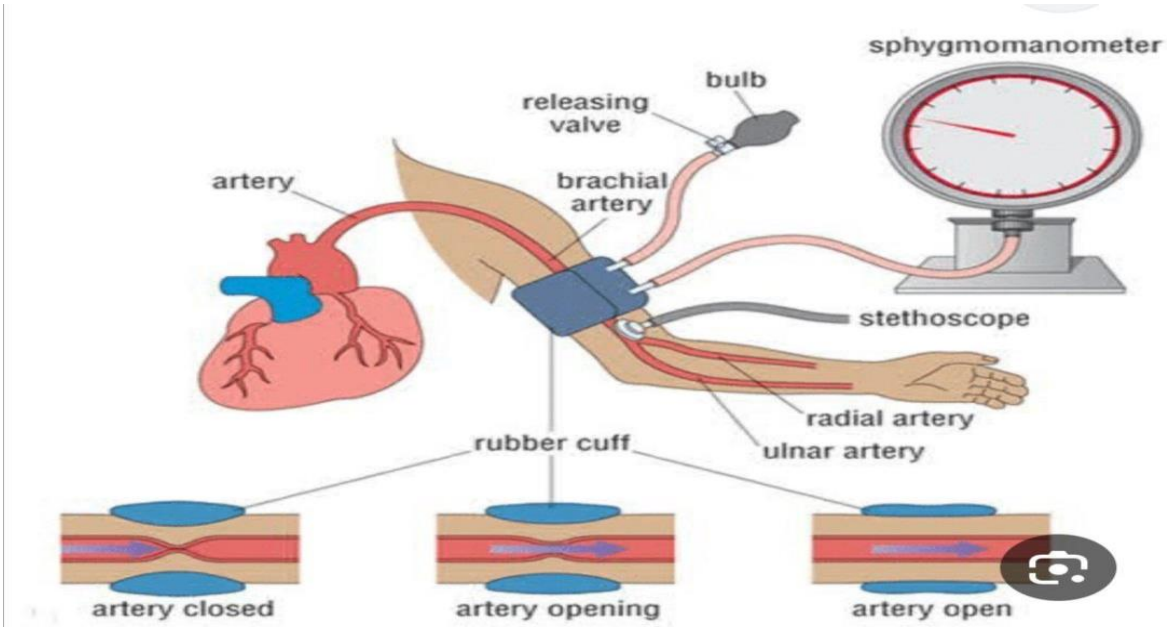
Sites for Measuring Blood pressure

1- Upper arm (using brachial artery) commonest
2- Thigh around popliteal artery
3- For using radial artery
4- Leg-arm posterior tibial or dorsal pedis

Sites of blood pressure

1- Radial artery
2- Brachial artery .
3- Dorsal artery .
4- Posterior artery .
5- Popliteal artery.


Radial artery
Position limb at level of heart.
Place cuff above wrist.
Auscultate radial artery.
Dorsal pedal artery
Place cuff above the malleolus or midcalf.
Auscultate either the posterior tibial artery or the dorsalis pedis artery.
Posterior tibial artery
Brachial artery
Position limb at level of heart.
Place cuff on upper arm.
Auscultate brachial artery.
Popliteal artery
Place cuff above knee.
Auscultate the popliteal artery.


sphygmomanometer
bulb
releasing valve
artery
brachial artery
stethoscope
radial artery
ulnar artery
rubber cuff
artery closed
artery opening
artery open

Instructions for use with stethoscope DIXIE EMS

Step 1

Twist the air release valve all the way to the right to close it off.

Step 2

Wrap the cuff around the arm just above the elbow. Keep it snug but not too tight.

Step 3

Place the stethoscope head on the brachial artery and find the pulse.

Step 4

Pump air into the cuff until you no longer hear the pulse.

Step 5

Release the valve and listen to the beats.

Step 6

Record the first and the last heart beat you hear -> systolic and diastolic pulse.

BLEEDING

It’s the exit of blood from an artery , venous, capillary vessel after separation occure connection in its walls .

Types of bleeding

According to the bleeding vessel

1- Arterial bleeding ;- the color of blood is red and flows in proportion to the pulse my heart .
2- Venous bleeding ;- the is dark red color abundantly and without interruption
3- Capillary bleeding ;- the blood is continuous red color and little abundance

Ambulance of venous bleeding

1- The patient lies down and raises the affected limb .
2- Lifts tight clothing such as belts and ties .
3- Press on the bleeding site .
4- Apply clean bandage or handkerchief and tie it with a bandage

ما هي أنواع أو مصادر النزيف؟

النزيف الشعيري

يسيل ببطء على سطح الجلد من الشعيرات الدموية

لونه أحمر

النزيف الوريدي

يسيل بانسيابية مستقرة وثابت التدفق

لونه أحمر غامق

النزيف الشرياني

يتدفق بغزارة من الجرح بدفعات متزامنة مع النبض

لونه أحمر فاتح

Types of according to the occurs times

1- Primar bleeding ;- occurs at the times of injure .
2- Reactionary bleeding ;- occurs 24 hours after intial bleeding and external human body or internal organs penetrate .

Fractions

It's a laceration (broken) or crack that occurs in the bones , whether in one or more place .

Types of fracture

1- Open fracture ;- the skin is cut.(compound fracture)
2- Close fracture ;- skin intact. (simple fracture)
3- Complex fracture;- ribes

Causes of fracture

1- Apparent accident
2- Without accident ;- e.g Rickets

Fracture Signs

1- Sever pain at the site of injure

2- Swelling at the fracture site

3- Changing shape of the broken limb

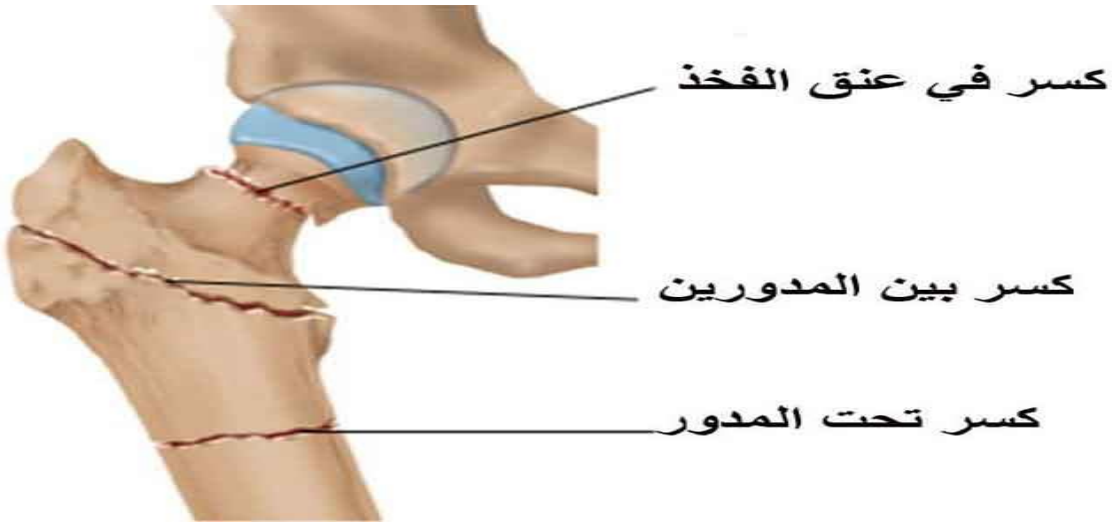
General rules of treating factures

Practical steps for fractures

1- The fracture is treated immediately at the site of the injured and the injured limb is bandaged in a preliminary manner.

2- We immediately immobilize the injured limb until we completely immobilize the fracture and prevent it from moving .

3- Prevents the broken bone from moving by connecting the injured limb to the healthy part of the body by means of bandages or splints .




بسيط
كسر بسيط يمتد في العظم.
كسر الغصن الصغير
كسر غير كامل، يلتوي العظم.
مسحوق
ينكسر العظم إلى شظيتين أو أكثر.
مفتوح أو مركب
يشق العظم المكسور الجلد.

زاوية الكسر


مائل
يدخل الكسر محور العظم بزاوية مائلة.
لولبي
يلتف الكسر حول محور العظم.
مستعرض
يعبر الكسر محور العظم عرضياً.

Wounds

It’s a tear in the body tissues as a result of external effecting and the exit of blood from them it with the entry of germs . the bleeding must be stopped first and the wound must be preserved .

Wound Section

1- Simple wounds ;- wash with a sterile solution, place a dry bandage over thethe effected area then secure with a bandage or plaster .
2- Incised wounds ;-
   Caused by sharp objects such as Knife or razor blade
3- Lacerated wounds ;-
   Caused by blunt instruments and machines. The wounds irregular site.

4- Puncture wounds ;-
   The wounds have simple holes that may be deep
5- Contused wounds ;-
   Trauma to the tissue and organs .
6- Gunshot wounds ;-

Mot the wounds are very dangerous .

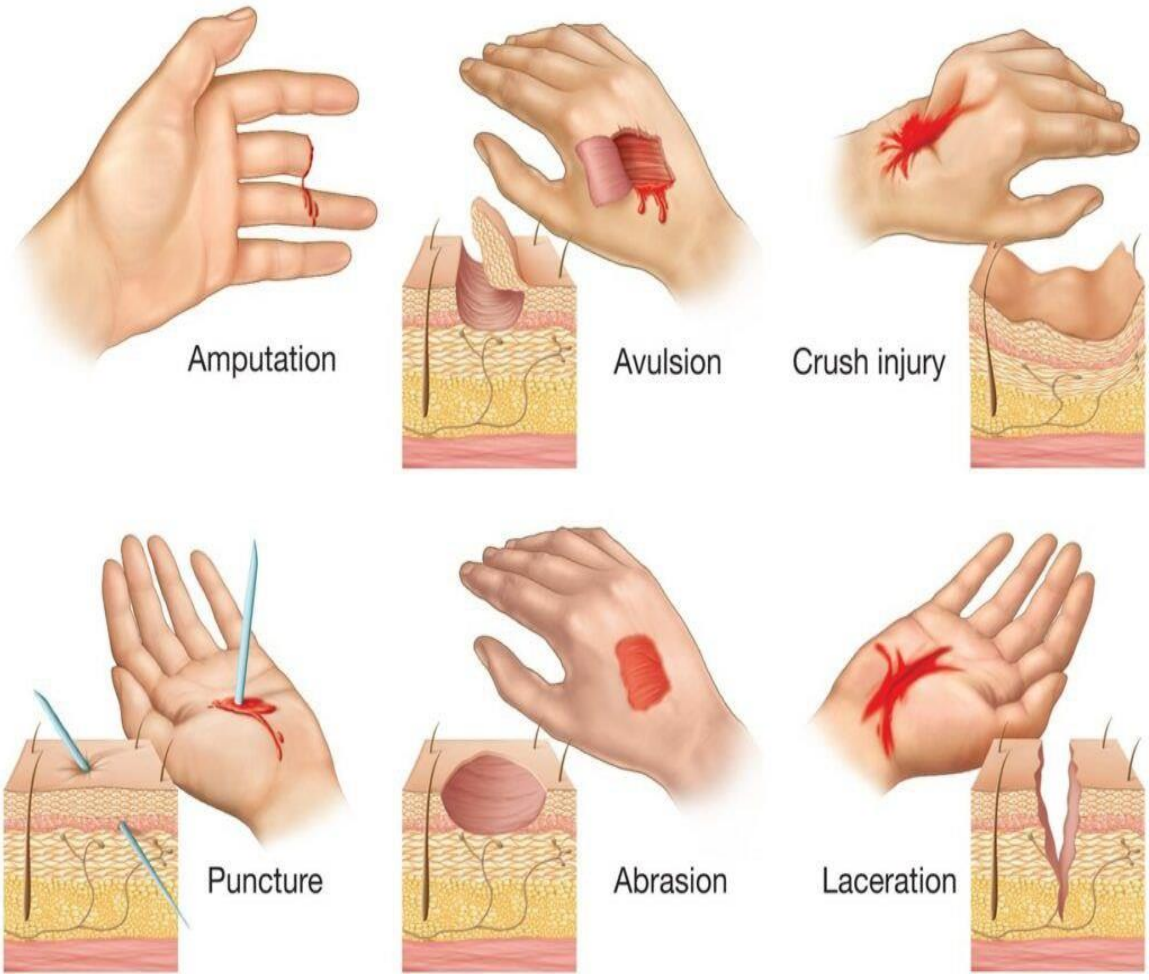
7- Special wounds ;-

Such as eyes , head , abdomen

8- Penetraing wounds ;-

External opening of the wound is small in relation to deep.

9- Perforating wounds ;- cause an entry and exit hole .



Burns

It’s a tissue fibrosis caused by various types of heat .

Severity of burns depends on

1- Ethnic space
2-Depth
3-Loaction in the body
4-Age

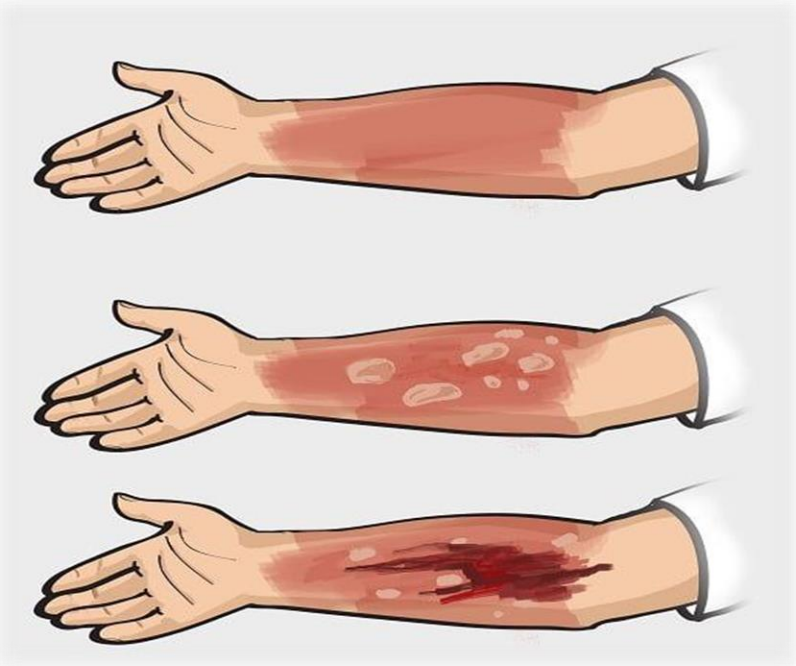
Sources of burns

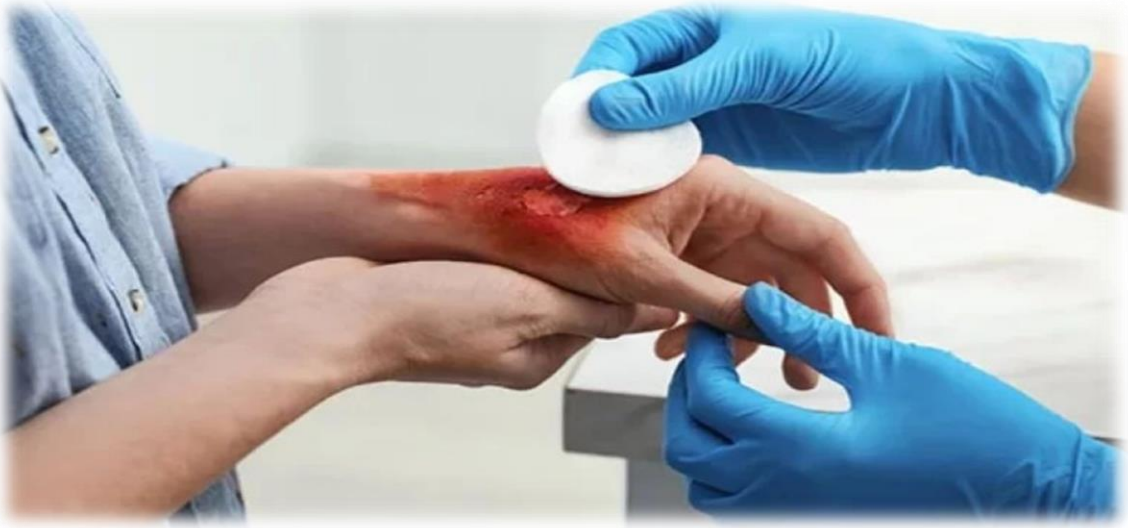
1- Dry and heat as burning with fire and flame
2- Friction holding amoving rope
3- Caustic material (acids)
4- Hot liquids
5- Extreme cold, such as oxygen

General steps for treating burns

1- Replace lost fluids
2- Place the affected part under the tap or in cold water for 10 minutes to reduce pain
3- Lift the locks and belt

4- The patient lies down and the affected part is covered with abandage or any clean cover





Artificial Respiration

It's the process performed on people who have suffered from respiratoy failure in order to restor breathing to.

Used A. R in two cases

1- Sudden respirature arrest as in drowing, gas poisoning or suicide by usinglarge amount of medication such as Aspirin .
2- Respiratory failure due to disease

Methods of performing artificial respiration

1- Piston pressure ;- used in

*the ribs are broken

*he is lying on his back

2- Blowing from mouth to mouth

3-Rubber bag method
4 –How to use a mask with a tube attached
5- Sylvester method

The way of kissing life from mouth to mouth

1- Put the jaw forward with the mouth open
2- Observing open air ways

3- The head continues to be pushed back
4- Your lips should be tightly closed around the injured persons mouth
5- Nose closed hand.

Normal rang

The number of blows of adult 12 times/minute

The number of blows of children 20 times/minute

CHOKING

Is the absence or lack of oxygen reaching the lungs , which leads to cell death . for example..Brain nerve cells may die if they lose oxygen for more than 3 minutes.

Causes of choking

1- Blocked air way
2- Fluid in air way due to drowning
3- Hanging
4- Chest compression
5- Lung diseases
6- Emotional seizures
7- Plastic bag
8- Pillow
9- Fire
10- High altitutes
11- Poisoning by carbon monoxide and cyanide

Sign of suffocation

1- Cough
2- Cynosis
3- Apnea
4- Loss of feeling (fainting)
5- Heart beat stops.

Practical steps to provide first aid to choking person

1- Remove the cause and if it in the room, open the windows
2- Unbutton the clothes around the neck and chest.
3- Perform artificial , call adoctor and warm with a cover
4- If the patient wakes up and is able to swaiiow, give him a few sips of tea or anything warm.

Heart Massage

Is the process that aims to restore the heart to its normal function and movement.

Types methods of heart massage

1- Internal method
2- External method

Stepes of the external massage

1- The patient is place lying on the floor or on a hard surfaced
2- The paramatic places the palm of his right hand on his left hand on the lower part of the sternum in the middle of the chest patient.
3- the rescure presses downward vertically and for cefully. Using his body weight,60 times/minute
4- Al the end of each compression, the rescuer pushes his hand slightly away from the injured person chest and allows the chest to fully expand
5- Sufficient pressure must be applied to compress the sternum vertically and the distance is approoximatelly , one inch

Poisoning

Its any substance that it enters the body in any quantily or from . leads to atemporary or permanent function of one or more organs and lead to death .

Classification of poisoning

1- Natural Sources

*Snakes

* Scorpions

* Insects

* Fish

* Cannabis

* Algas

*Arsenic

* Lead

2- Industril Sourse

Insecticides such as

- Folic idal
- Toxic gases
- Nuclear radiation
- Plastic materials

Smptoms & Signs of poisoning

1- Digestive….such as food poisoning occure

*Diarrhea

* Vomiting ;-- resulting from acut inflammation of digestive system ,this appear after 24 hrs after eating & drinking.

2- Hearty

3Urinary

4-Nervous ness

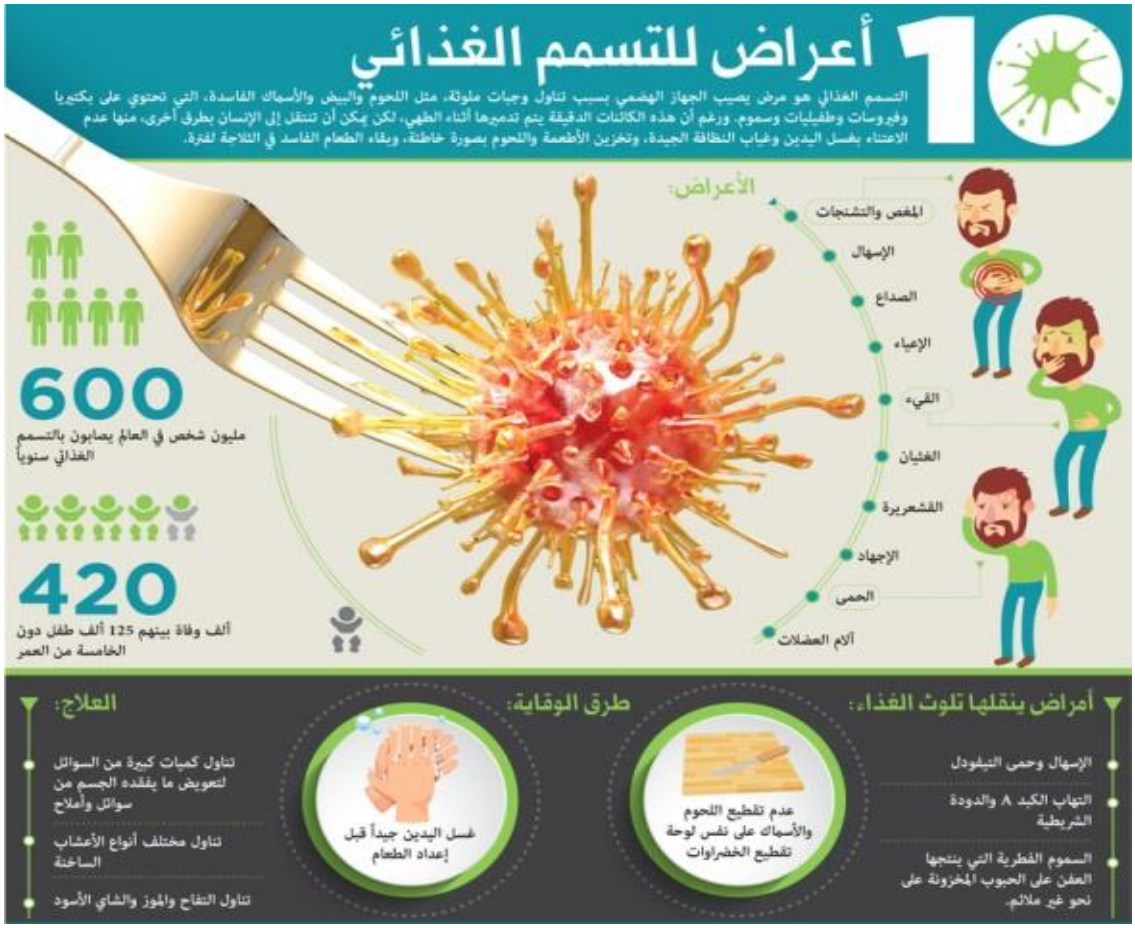
5-Respiratory

6- Dermatology

Treatment & First aid

First aid;- replacing lost fluids and salts

Treatment ;- Gastric lavage if the cause presence chemical substance.


10
أعراض للتسمم الغذائي
التسمم الغذائي هو مرض يصيب الجهاز الهضمي بسبب تناول وجبات ملوثة، مثل اللحوم والبيض والأسماك الفاسدة، التي تحتوي على بكتيريا وفيروسات وطفيليات وسموم. ورغم أن هذه الكائنات الدقيقة يتم تدميرها أثناء الطهي، لكن يمكن أن تنتقل إلى الإنسان بطرق أخرى، منها عدم الاعتناء بغسل اليدين وغياب النظافة الجيدة، وتخزين الأطعمة واللحوم بصورة خاطئة، وبقاء الطعام الفاسد في الثلاجة لفترة.
الأعراض:
المغص والتشنجات
الإسهال
الصداع
الإعياء
القيء
الغثيان
القشعريرة
الإجهاد
الحمى
آلام العضلات
600
مليون شخص في العالم يصابون بالتسمم الغذائي سنوياً
420
ألف وفاة بينهم 125 ألف طفل دون الخامسة من العمر
أمراض ينقلها تلوث الغذاء:
الإسهال وحمى التيفوئيد
التهاب الكبد A والدودة الشريطية
السموم الفطرية التي ينتجها العفن على الحبوب المخزونة على نحو غير ملائم.
طرق الوقاية:
عدم تقطيع اللحوم والأسماك على نفس لوحة تقطيع الخضراوات
غسل اليدين جيداً قبل إعداد الطعام
العلاج:
تناول كميات كبيرة من السوائل لتعويض ما يفقده الجسم من سوائل وأملاح
تناول مختلف أنواع الأعشاب الساخنة
تناول التفاح والموز والشاي الأسود


صحة المرأة
Women's Health
أعراض
التسمم الغذائي
القيء
الاسهال
اضطراب المعدة
آلام المعدة
ارتفاع درجة الحرارة
الصداع


إحذر هذه التسممات

Sterilization and disinfection

Disinfection ;- killing or remving micro-organisms and preventing their growth that have the potential to cause disease to the body .

Steriliztion ;- is the process by which all living things can be eliminated and any form of life .whether plant or animal, visible or invisible , harmaful or harmless, such as germs, bacteria ,fungi, …..can be select viruses .

Disinfectant ;- it's a chemical agent that has the ability to kill the types of germs that cause disease in the stomato .it prevents the growth of the germs effective ness and dose not necessarily eliminate them.(Chlorine and iodine)

Types methods of sterilization

A--Physical methods include

- **Thermal methods are divided in to**

1- Dry heat ..such as surgical instruments used(air oven , hot alcohol lamp , thermal devices)

2- Moist heat ..divided in to three sections

- >100 C. Autoclave .
- <100 C. Which is the boiling point, water ,other fluids
- 60—62C pasteurization used to heat milk and sensitive solution

- Steam+ pressure.used to sterilize growing media .

3- Sourse Wave pressure (pascalization) such as sun light

B—Chemical methods ;- used chemical solulion such as Hydrogen peroxide , Hydrochloride ….. or gases to eliminate germs such as Ethylene oxide , Nitrogen oxide….

C- Mechanical methods ;- Filtration of liquids or gases by irradiation such as Ionization . non ionization (ultra violet radation)

Effectiveness of organic sterilizing solution depend on

1- Presence or absence of organic matter .
2- How to use it correctly .
3- Types of micro-organisms to be killed .
4- Time of exposure to the sterilized.


How to
STERILIZE MEDICAL
EQUIPMENT


Cleaning
Disinfection and
Sterilization of…

Drawing blood

Mean the process to drawing blood for any person from blood vessel (artery , vein , capillary) to working any tests .

Purpose of drawing blood

1- Check up of patient .
2- Diagnosis if present any disease or inflammation in his body .
3- Performing a surgery .
4- Blood donation & compatibility test .
5- Detect if the person did not have any specific disease such as (syphilis , AIDS , malaria,viral hepatitis …….)

Methods of blood collection

1- Skin puncture;

- Finger puncture .
- Heel stick puncture
- Ear puncture

2- Vein puncture
3- Arterial punture

Material required

1- Disposable plastic syringe
2- Rubber band
3- Sterilized and with light conc
4- Medical cotton
5- Clean tube

Procedure

1-check the syring to make sure it is expired.

2-the patient should be in a comfortable position, free from fear and anxiety

3-Remove the clothes from the arm, tie the tourniq and ask the patient to close his palm.

4-Touch the patient with index finger as its spongy .

5-The needle is inserted at a 15 degree angle in the case of a superficial vein. if deep the needle as 45 degree

6-After pulling , open tourniquet ,place a piece of cotton, one the hand and band


طرق السحب
Mo Sileem
syringe
الحلقة الثالثة
Vacuum

Types of samples I (specimen collection)

1-Urine sample

2-Blood sample ;- divided in to

- Routine test …such as Hb ,P.C.V , R.B.CS , W.B.CS , Platelete, Clotting time , Bleeding time , …….
- Non routine test….such as V.D.R.L, Wida l test , Rh , Blood culture …….

3- Stool sample

4- Sputum sample

5- Seminal fluid sample

6- C.S.F sample (cerebro spinal fluid) certain safety factor.

7- Swab for any organ in the body such as throad swab , ear swab vaginal swab …

8- Biopsy after performing surgery .

Methods of medicatiom

Medication ;- is a substance or compound material give to any person to prevent ,diagnosis ,cure and treatment a pateint.

Purposes of medication

1- Diagnosis such as tuber culosis .....

2-Prevention such as vaccinations

3-Treatment such as aspirin or vitamins or any antibiotic healing .

4-Cure .

Methods of administering medication

1-Mouth

2-Ingection by needle ;- divided in to

- Intar muscular
- Intar venous , inter arterial .
- Subcutaneous skin
- Inter muscular and Intar venouse.
- Intar – articular

3-Skin

4-Rectal

5-Eyes

6-Ear

Material used

1-Needle size(21,22,23.)

2-Syringes (2—5) cc

3-Medical cotton

4-Required medication

5-Sterilization

Action steps

1-prepaing the medication

2-the patient is placed in a comfortable position , either face down or on his side.

3-the site of the inection is the upper part of the outer quadrant of the primary muscle (the temporary used muscle deltoid)

4-the needle is quickly injected after sterilization at90 degree angle.

** treatments of a fatty nature are deeply eroded