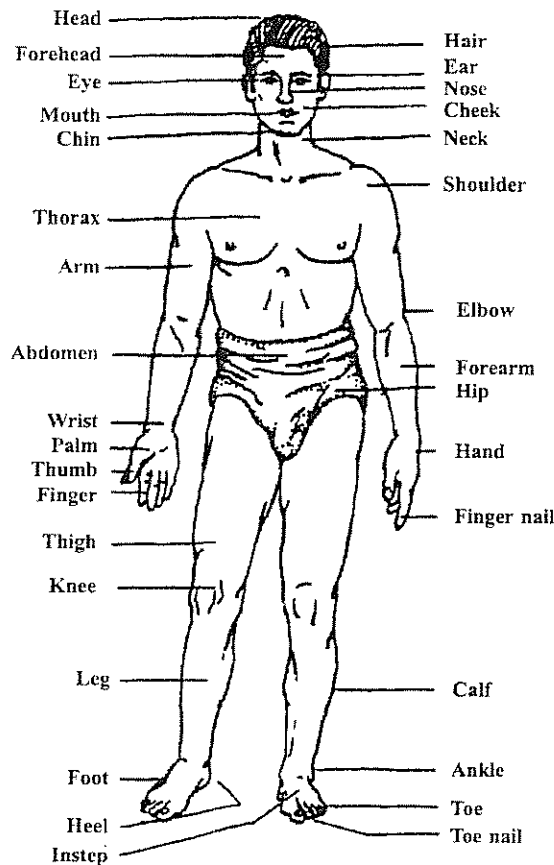


THE HUMAN BODY



The human body has a complex structure. It is built up of millions of cells which form organs and systems. The human body consists of three main parts: the head, the trunk, upper and lower extremities. The head has the face in front and the neck below. The eyes, which are the organs of vision, are situated on both sides of the nose. The forehead lies above the eyes and the cheeks are below them. The mouth, which is bounded by upper and lower lips, contains the tongue and the teeth. On both sides of the head are the ears - the organs of hearing. The neck joins the head to the trunk. It is the biggest part of the body and consists of two main cavities: the thorax (or the chest) and the abdomen. The thorax lies above the diaphragm and the abdomen lies below it. The area between the shoulders and the buttocks is the back.

The upper extremities (or limbs) are connected to the trunk by the shoulder girdle. They are composed of three segments: the arm, the forearm, and the hand with four fingers and one thumb. The lower extremities also consist of three parts: the thigh, the leg, and the foot with toes. On the terminal segments of the fingers are finger nails, on the toes - the toe nails. The joints of the upper limbs are the elbow and the wrist. The joints of the lower limbs are the hip joint, the knee and the ankle.



Word List

- abdomen [ˈæbdəmən; æbˈdəʊmən] - brzuch
- ankle [æŋkl] - kostka
- arm [ɑ:m] - ramię
- cavity [ˈkævɪti] - jama ciała
- cheek [tʃi:k] - policzek
- chest [tʃest] - klatka piersiowa
- elbow [ˈelbəʊ] - łokieć
- extremity [ɪksˈtremɪti] - kończyna
- eye [aɪ] - oko
- face [feɪs] - twarz
- foot [fʊt] (pl. feet) - stopa
- forearm [ˈfɔ:ɹɑ:m] - przedramię
- forehead [ˈfɔ:ɹɪd; ˈfɔ:hed] - czoło
- hand [hænd] - ręka
- head [hed] - głowa
- knee [ni:] - kolano
- leg [leg] - podudzie, noga
- limb [lɪm] - kończyna
- lip [lɪp] - wargę
- male [meɪl] - męski
- mouth [maʊθ] - usta
- nail [neɪl] - paznokieć
- neck [nek] - szyja
- nose [nəʊs] - nos
- rib [rɪb] - żebro
- shoulder girdle [ˈʃəʊldə ɡɜ:dl] - obręcz barkowa
- thigh [θaɪ] - udo
- thumb [θʌm] - kciuk
- toe [təʊ] - palec u nogi
- trunk [trʌŋk] - tułów
- wrist [rɪst] - nadgarstek

*limb - kończyna
joint - staw*

Fig. 1. The human body



EXERCISE A. Answer the following questions.

1. What are the main parts of the human body?
2. What are the parts of the face?
3. Which is the biggest part of the human body?
4. What are the parts of the upper and lower limbs?

EXERCISE B. Put the words given below in the proper column.

the arm • the ankle • the cheek • the chest • the elbow • the eye • the foot • the mouth • the thigh
• the thumb • the toe • the wrist • the waist • the ear • the finger nail • the back • the hip • the hand
• the leg

the head	the trunk	the upper extremity	the lower extremity
		the arm	

EXERCISE C. Where do you wear the things listed below? Make sentences as in the example, using the prepositions *in, on, round*.

Example: You wear gloves on your hands.

earrings • a watch • make-up • shoes • spectacles • a scarf • an umbrella • a hat • a belt • a ring
• a bracelet • a rucksack • a ribbon • tights • a bag • slippers • nail polish • a cap • a necklace

EXERCISE D. Which part of the body can you break, twist, or hurt? Make some sentences as in the example.

Example: You can break your arm or your leg.

EXERCISE E. Complete the sentences, using the following words: **above, below, on the sides of, between.**

1. The neck is located the head and the trunk.
2. The forearm is the arm.
3. The ears lie the head.
4. The leg is the thigh.
5. The ankle is located the foot.
6. The middle finger is the forefinger and ring finger.

THE ANATOMICAL DIRECTIONS



The description of the location of a body part is usually made with reference to other structures. The following locative adjectives are commonly used in medical writing to describe location or place of parts of the body:

- 1) right, left
- 2) outside, inside
- 3) upper, lower
- 4) internal, external
- 5) superficial, deep (nearer and farther from the surface of the body)
- 6) proximal, distal (especially of limbs, nearer and farther from the trunk)
- 7) superior, inferior (higher and lower)
- 8) anterior, posterior (nearer the front, nearer the back)
- 9) ventral, dorsal (the front, the back)
- 10) medial, lateral (nearer and farther from the midline)

For example, the thorax is **above** the abdomen, the elbow is **between** the arm and forearm. We can also say, the thorax is **superior** to the abdomen.

Study other examples:

The diaphragm is **inferior** to the lungs and it is **superior** to the pancreas. The upper limbs are **lateral** to the trunk. The wrist is **distal** to the arm; it is **proximal** to the fingers. The front surface of the body is the **ventral** surface, the back surface is the **dorsal** surface of the body. The outside of the leg is the **lateral** surface; the inside of the leg is the **medial** surface. The trachea runs **anteriorly** to the oesophagus.

Word List

- anterior [æn'tiəriə] – przedni
- ascend [ə'send] – iść w górę, wznosić się, wstępować
- comprise [kəm'praiz] – zawierać, składać się, obejmować
- contain [kən'tein] – zawierać, mieścić w sobie
- couch [kaʊtʃ] – leżanka, kozetka
- descend [di'send] – schodzić, obniżać się, zstępować
- direct [di'rekt; daɪ'rekt] – kierować, skierować; bezpośredni
- distal ['distəl] – dystalny, dalszy, końcowy
- dorsal ['do:səl] – grzbietowy
- downwards ['daunwədʒ] – na (w) dół, ku dołowi
- extend [ik'stend] – zasięg; rozciągać, rozprzestrzeniać
- forwards ['fo:wədʒ] – naprzód, ku przodowi
- lateral ['læterəl] – boczny, poprzeczny
- medial ['mi:diəl] – środkowy
- navel ['neɪvəl] – pępek
- palm [pɑ:m] – dłoń
- parallel ['pærələl] – równoległy
- pass [pɑ:s] – przejście; przechodzić
- posterior [po'stəriə] – tylny, ku tyłowi
- proximal ['proksiməl] – bliższy, dosiebny, proksymalny
- side [saɪd] – strona, bok
- superior [sju:'piəriə] – górny, wyższy
- surface ['sə:fis] – powierzchnia, zewnętrzna strona
- trachea [trə'ki:ə] – tchawica
- upright ['ʌpraɪt] – wyprostowany
- ventral ['ventrəl] – brzuszny

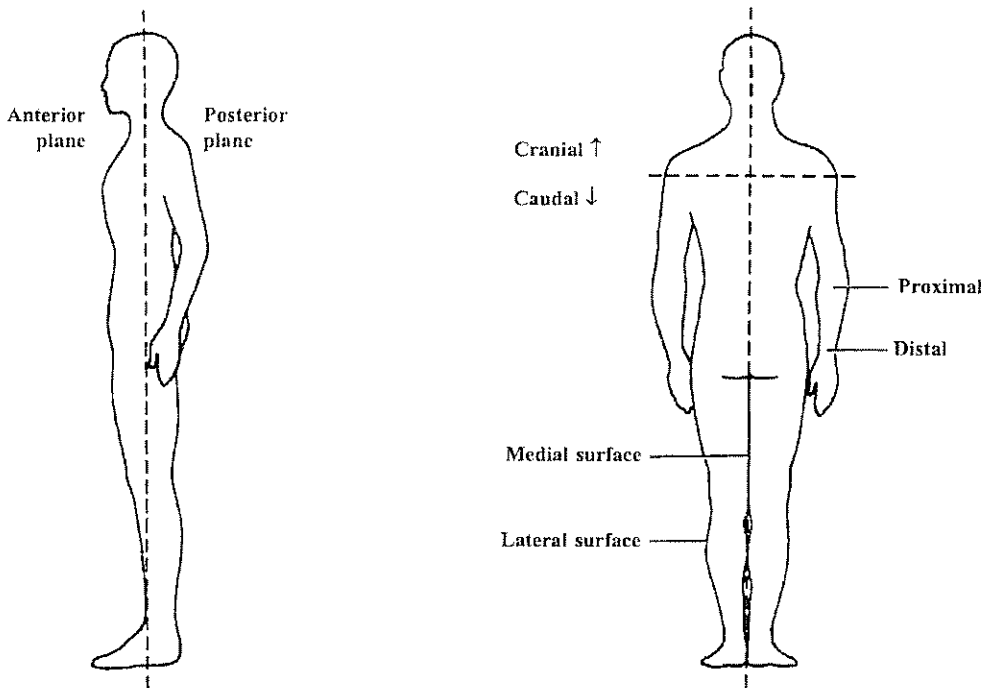


Fig. 2. Directions of the body



EXERCISE A. Choose the appropriate locative adjective to complete the following sentences.

1. The eyes are *adjacent* to the nose.
2. The mouth is *below* to the nose.
3. The thorax is *adjacent* to the abdomen.
4. The elbow is *adjacent* to the wrist.
5. The seven ribs are joined *adjacent* to the sternum and all the ribs are joined *adjacent* to the vertebral column.
6. The heart lies *adjacent* to the lungs.
7. The palm of the hand is on its *palmar* surface.
8. The little toe is on the *medial* surface of the foot.
9. The bones of the ankle are on *medial* and *lateral* sides of the leg.
10. The calf is the *distal* side of the leg.
11. A wrist watch is worn on the *distal* area of the lower arm.



EXERCISE B. Practise this dialogue.

Nurse: I'd like you to stand up straight, the arms by the sides and the legs parallel to each other. Raise your arms above the head and put them slowly down. Now, please lie down on the couch with your legs stretched out in front of you. Try to lift your head up slowly as far as you can. Do you feel any pain in your neck or back?

Patient: No, I don't.

Nurse: That's OK. Now, lift your right leg up straight without bending your knee and then bring it down. Repeat this with your left leg. Do you feel anything?

Patient: Oh, yes. This time I feel a sharp pain in my lower back.

Nurse: Stand up, please. Keep your legs stretched, feet together. I'd like you to bend down. Try to touch your toes with your fingers.

Patient: I can't bend down any more, it hurts me terribly in my back.

Nurse: That's enough. Thank you, Mr Roberts.

EXERCISE C. Translate into English.

1. Oczy położone są po obu stronach nosa.
2. Usta znajdują się poniżej nosa.
3. Klatka piersiowa leży nad przeponą.
4. Wewnętrzna strona uda jest środkową powierzchnią.
5. Tchawica zstępuje przed przelykiem.
6. Plecy są na grzbietowej powierzchni ciała.

THE BODY CAVITIES



There are three main cavities in the human body: the cranial cavity, the thoracic cavity and the abdominopelvic cavity.

The cranial cavity is situated in the head. It contains the brain, which is the central part of the nervous system.

The thoracic cavity extends from the base of the neck to the diaphragm. The thorax (or the chest) is protected by the ribs, the sternum and the spinal column. The main structures in the thorax are the heart, the lungs, the oesophagus and large blood vessels, such as the aorta and pulmonary arteries.

The abdominopelvic cavity, which is the largest cavity in the body lies below the diaphragm. It consists of two parts: the abdominal cavity proper and the pelvic cavity. The abdominal wall is made up of three layers of muscles, fatty tissue and the skin. The contents of the abdominal cavity include the stomach, small and large intestines, the liver, the pancreas, the spleen and the kidneys.

The pelvic cavity is located inferior to the abdominal cavity. The contents of the pelvis are: the urinary bladder, the lower part of the large intestine, the rectum and in females the female reproductive organs. These include two ovaries, Fallopian tubes (or oviducts), uterus and vagina.

EXERCISE A. Answer the following questions.

1. What are the main cavities in the body?
2. What is the thorax bounded by?
3. What organs does the thoracic cavity contain?
4. What are the contents of the abdominal cavity?
5. What organs lie in the pelvis?
6. Which is the largest cavity in the human body?

EXERCISE B. Put the words listed below in the right column.

the trachea • the stomach • the kidneys • the lungs • the bladder • the brain • the heart • the rectum • the oesophagus • the ureter • the sternum • the liver • the duodenum • the ribs • the sacrum • the aorta • the ovaries • the pulmonary arteries • the uterus

the cranial cavity	the thoracic cavity	the abdominal cavity	the pelvic cavity

EXERCISE C. Match the two columns and then make full sentences, using the expressions: be responsible for, be concerned with, deal with.

Example: The nervous system is responsible for sensitivity by controlling the response to the internal and external stimuli.

- | | |
|------------------------|--|
| 1. Nervous system | a) transport of food, wastes and respiratory gases |
| 2. Endocrine system | b) nutrition (ingestion, digestion and absorption of food) |
| 3. Respiratory system | c) sensitivity to the internal and external stimuli |
| 4. Circulatory system | d) reproduction |
| 5. Digestive system | e) movement |
| 6. Excretory system | f) metabolism, growth and sexual characteristics |
| 7. Reproductive system | g) respiration (oxygen intake and carbon dioxide loss) |
| 8. Locomotor system | h) excretion (elimination of waste products of metabolism) |

Word List

- abdominopelvic cavity [ˌæbdəˈmɪnəˈpelvɪk ˈkævɪtɪ] – jama brzuszno-miedniczna
- brain [breɪn] – mózg
- cranial cavity [ˈkreɪniəl ˈkævɪtɪ] – jama czaszkowa
- diaphragm [ˈdaɪəfræm] – przepona
- Fallopian tube [fəˌlɒpiən ˈtjuːb] – jajowód
- feverish [ˈfiːvərɪʃ] – gorączkujący
- heart [hɑːt] – serce
- large intestine [ˌlɑːdʒ ɪnˈtestɪn] – jelito grube
- liver [ˈlɪvə] – wątroba
- lung [lʌŋ] – płuco
- (o)esophagus [iˈsɒfəɡəs] – przelyk
- ovary [ˈəʊvəri] – jajnik
- oviduct [ˈəʊvɪdʌkt] – jajowód
- pancreas [ˈpæŋkriəs] – trzustka
- pelvis [ˈpelvɪs] – miednica
- peritoneum [ˌperɪtəʊˈniːəm] – otrzewna
- rectum [ˈrektəm] – odbył
- reproductive [ˌriːprəˈdʌktɪv] – rozrodczy
- reproductive organs (pl.) [ˌriːprəˈdʌktɪv ˈɔːɡənz] – organy rozrodcze
- rib [rɪb] – żebro
- slightly [ˈslaɪtlɪ] – nieznacznie
- small intestine [smɔːl ɪnˈtestɪn] – jelito cienkie
- spinal column [ˌspɑɪn ˈkɒləm] – kręgosłup
- spleen [spliːn] – śledziona
- sternum [ˈstɜːnəm] – mostek
- stomach [ˈstʌmək] – żołądek
- thoracic cavity [θɔːˈræsɪk ˈkævɪtɪ] – jama klatki piersiowej
- urinary bladder [ˈjuːrɪnəri ˈblædə] – pęcherz moczowy
- uterus [ˈjuːtərəs] – macica
- vagina [vəˈdʒaɪnə] – pochwa



EXERCISE D. Study the table below and then complete the sentences, choosing suitable verbs of position from Table 1.

Table 1. Verbs denoting position, direction and structure

Position	Direction	Structure
be be found lie be situated be located	be directed lead run extend pass descend ascend	be made up of consist of be composed of be built up of contain comprise

1. The nose in the central part of the face.
2. The cheeks on either side of the face.
3. The forehead above the nose.
4. The mouth below the nose.
5. The diaphragm between the thorax and abdomen.
6. The abdomen below the diaphragm.

EXERCISE E. Complete the following sentences choosing suitable verbs of direction from Table 1.

1. The oesophagus downwards to the stomach.
2. The aorta through the diaphragm.
3. The trachea from the pharynx to the main bronchi.
4. The trachea in front of the oesophagus.
5. The optic nerve from the retina into the cranial cavity.
6. The acoustic nerve from the organ of Corti into the brain.

EXERCISE F. Complete the following sentences choosing suitable verbs of structure from Table 1.

1. The skull the brain.
2. The trunk two cavities.
3. The upper limb three segments.
4. The lower limb three parts.
5. The upper limb two joints.
6. The lower limb two joints.

EXERCISE G. Translate into English.

1. Jama piersiowa jest ograniczona od przodu mostkiem, z boku żebrami, a z tyłu kręgosłupem.
2. Serce oraz płuca, położone po jego obu stronach, znajdują się w jamie piersiowej.
3. Jama brzuszna, która jest największą jamą ciała, zawiera główne części układu pokarmowego.
4. Żołądek prowadzi do jelita cienkiego, które przechodzi w jelito grube.
5. Jama miednicza, która położona jest pod jamą brzuszną, zawiera pęcherz moczowy, dolną część jelita grubego, odbył oraz żeńskie narządy rozrodcze.

THE PULSE RATE



Word List

- ♦ beat [bi:t] – uderzenie; uderzyć
- ♦ count [kaunt] – liczba, ilość; liczyć
- ♦ excitement [ik'saitmant] – podniecenie, zdenerwowanie
- ♦ fear [fiə] – strach, obawa
- ♦ heartbeat ['ha:t,bi:t] – uderzenie serca, bicie serca
- ♦ hold [həuld] – trzymać
- ♦ index finger ['indeks, fɪŋgə] – palec wskazujący
- ♦ indicate ['indiket] – wskazać, wskazywać
- ♦ infant ['ɪnfənt] – niemowlę, dziecko do 2 lat
- ♦ middle finger [ˌmɪd'l 'fɪŋgə] – palec środkowy
- ♦ newborn ['nju:bo:n] – noworodek
- ♦ pulse [pʌls] – tętno, puls
- ♦ radial ['reɪdiəl] – promieniowy
- ♦ rapid ['ræpɪd] – szybki
- ♦ relaxation [ˌri:læks'eɪʃən] – rozluźnienie, odprężenie
- ♦ sex [seks] – płeć
- ♦ thready ['θredi] – nitkowaty

The pulse beat is a measure of the heartbeat. Every time the heart beats the blood is forced through arteries round the body. The pulse beat can be felt easily on the radial artery at the patient's wrist. In order to take the pulse the nurse should hold the patient's hand with two fingers, the index finger and middle finger, over the pulse and the thumb on the back of the wrist. It should be remembered that the thumb has its own pulse and if it is put on the artery, the nurse may feel her own thumb pulse.

Another important vital sign, apart from temperature, is pulse rate. It is the number of times the heart beats per minute. The nurse counts the number of beats per minute and records its character, that is, whether it is weak or strong, slow or rapid, regular or irregular.

The normal pulse rate changes with age; it decreases with age. It is faster in females than in males. It varies with the position of the person; it is more rapid when the person is standing than when the person is sitting and slowest when the person is fully relaxed. The pulse rate increases during excitement, anger, fear and anxiety. It decreases during sleep, rest and relaxation.

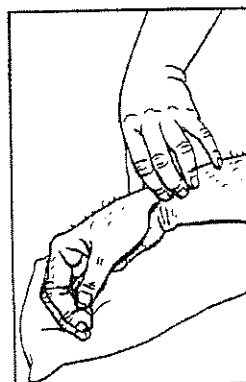


Fig. 14. Recording the pulse at the radial artery

In a newborn infant the normal pulse rate is 120-140 beats per minute. In the adult it is between 65-80 beats per minute. The pulse is usually slower in old age. A normal pulse beat should be related to the age of the person and have a regular rhythm.

Abnormalities in pulse, such as thready pulse, irregular rhythm, and a rate below 50 or above 100 should be reported to the doctor. Changes in the pulse beat indicate a serious problem with the patient's circulation.



EXERCISE A. Answer the following questions.

1. Where are the heartbeats transmitted?
2. What is the pulse rate?
3. How is the pulse measured?
4. Who has a faster pulse rate?
 - a man or a woman;
 - a baby or an adult;
 - a young person or an elderly;
 - a person who is working or sleeping;
 - a relaxed person or an excited one?
5. What is a normal pulse rate in a newborn infant?
6. Should any abnormalities in the pulse beat be reported to the doctor? Why?

EXERCISE B. Choose the correct answer to complete the sentences.

1. The best site for taking the pulse beat is the patient's
 - a) elbow
 - b) wrist
 - c) knee

2. When taking the pulse, the fingers are put over the pulse.
 - a) middle and ring
 - b) ring and small
 - c) index and middle
3. The has its own pulse.
 - a) thumb
 - b) index finger
 - c) middle finger
4. In an adult the normal pulse is beats per minute.
 - a) 55 – 65
 - b) 65 – 80
 - c) 80 – 90
5. The pulse rate usually with age.
 - a) remains the same
 - b) increases
 - c) decreases
6. The pulse rate below per minute indicates a serious health problem.
 - a) 50 beats
 - b) 80 beats
 - c) 100 beats

EXERCISE C. Give the opposites of the following words.

- below - *above*
 easy - *difficult*
 female - *male*
 excited - *calm*
 front - *back*
 rapid - *slow*
 regular - *irregular*
 weak - *strong*

EXERCISE D. Make up the dialogues as in the example, using the prompts given below.

Example: A: What was the nurse doing when Dr Briggs entered the room?

B: She was taking the patient's pulse when Dr Briggs entered the room.

1. A: the nurse /do/ the patient /faint
 B: the nurse /collect the blood sample
2. A: the nurse /do/ the lights /go out
 B: bandage the patient's leg
3. A: Dr Briggs /do/ the nurse /enter the room
 B: examine the patient
4. A: Prof. Higgins /do/ Dr Martin /enter his office
 B: phone Prof. Peterson
5. A: the patient /do/ get an asthmatic attack
 B: have a short walk in the garden
6. A: the nurse /do/ the patient /start to cry
 B: give a painful injection

EXERCISE E. Study the following abbreviations used by doctors in making written orders for the nurses in hospitals. Then, write the sentences below in full, as in the example.

Table 4. Abbreviations related to time/schedules

Abbreviation	Meaning
sos	When necessary
q	Every
stat	Immediately
bid	Two times a day
tid	Three times a day
qid	Four times a day
h	Hour
qh	Every hour
d	Day
qd	Every day
qh	Every hour
q2h	Every two hours
AM	Morning
Mn	Midnight
N	Noon

Example: Urine specimens to lab qd AM. Urine specimens to the laboratory every day in the morning.

1. Throat culture stat.
2. Milk of magnesia 30 ml sos.
3. Shallow rapid breathing q4h for 2d.
4. Take T and P q2h.
5. OOB with assistance tid.
6. Blood sugar q2d AM.
7. NPO after N.
8. Chest X-ray stat.

EXERCISE F. Give the English equivalents of the Polish words in brackets.

1. He slipped, fell and (skaleczył) ~~his~~ his knee.
2. When he tried to walk, he felt a sharp (ból) in his left leg.
3. This woman looks pale. I'm afraid she is going to (zemdleć).
4. I've got such a bad (ból gardła) ----- I'm sure I've caught a cold.
5. She touched a hot pot and (oparzyła) ----- her hand.
6. She is short-sighted and has to wear (okulary) -----.
7. When he was playing basketball he (zwichnął) ----- his ankle.
8. There was an accident in West Street and someone has already called an (karetka pogotowia) -----.
9. His left kidney is in a poor condition, so he has to have kidney (przeszczerpienie) -----.

EXERCISE G. Translate into English.

1. Tętno mierzone jest na nadgarstku dwoma palcami: wskazującym i środkowym.
2. Oprócz uderzeń tętna na minutę, pielęgniarz musi zanotować jego charakter i rytm.
3. Tętno zależy od wieku, płci i pozycji w jakiej znajduje się pacjent.
4. Ilość uderzeń tętna wzrasta przy zdenerwowaniu, niepokoju i złości.
5. Normalne tętno u dorosłych wynosi 65 – 80 uderzeń na minutę i powinno mieć regularny rytm.
6. Siostrze, proszę mierzyć temu pacjentowi tętno co pół godziny.
7. Jeśli tętno będzie wyższe niż 100/min. proszę natychmiast mnie zawiadomić.

RESPIRATION



Respiration (or breathing) is essential for life, because each cell in the body must get oxygen or it will die. Respiration consists of an inspiration of the air into the lungs and an expiration of the air out of the lungs. During respiration oxygen is taken into the lungs and carried with the blood to all tissues, while carbon dioxide is taken from the tissues, carried to the lungs and expelled out. Oxygen and carbon dioxide are carried around the body by the red blood cells. Observation of respiration includes its rate and depth, sounds and difficulty in breathing.

In order to count the respiratory movements the nurse should hold the patient's arm in such a way that it lies lightly across his chest or abdomen. The patient should not be aware of what the nurse is doing because patients do not breathe normally if they notice the nurse's counting. It is quite easy to count the respiration rate with the nurse's hand on the patient's pulse. The rate should be counted for a full minute.

When recording the patient's respiration rate, the nurse should note its rate, character, depth, regularity and rhythm. Normal respiration is rhythmical, regular and quiet.

Word List

- administer [əd'ministə] – podawać, stosować lek
- apn(o)ea [æp'ni:ə] – bezdech
- carbon dioxide [ˌkɑ:bən daɪ'oksaɪd] – dwutlenek węgla
- chart [tʃɑ:t] – karta
- coma [ˈkəʊmə] – śpiączka (głęboka)
- condition [kən'diʃən] – stan, warunek
- decrease [di'kri:s] – zmniejszyć, obniżyć
- dyspn(o)ea [dis'pniə] – duszności
- expel [ɪk'spel] – wydalać, usuwać
- expiration [ˌekspi'reɪʃən] – wydech
- febrile state ['fi:brɪl 'steɪt] – stan gorączkowy
- hypnotic [hɪp'notɪk] – środek nasenny
- increase [ɪn'kri:s] – zwiększyć, podwyższyć
- infant ['ɪnfənt] – niemowlę, dziecko do 2 lat
- inspiration [ˌɪnspə'reɪʃən] – wdech, inspiracja
- involuntary [ɪn'vɒləntəri] – mimowolny, niezależny od woli
- pause [po:z] – pauza, przerwa
- shallow ['ʃæləʊ] – płytki
- temporary ['tempərəri] – tymczasowy
- voluntary ['vɒləntəri] – dobrowolny, nieprzymusowy

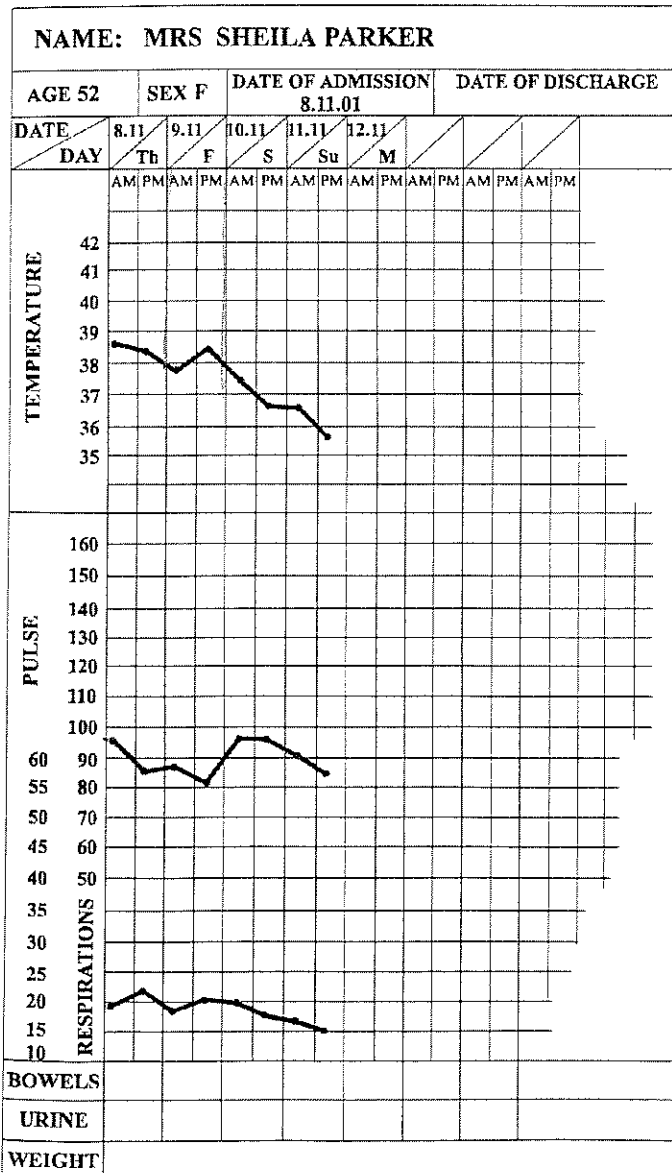


Fig. 15. The chart of the patient's temperature, pulse and respiration (the t.p.r. chart)

EXERCISE E. Make up dialogues between a nurse and a student nurse, Linda, as in the example.
Use the prompts given below.

Example: Linda: Shall I bandage the wound?

Nurse: No, put on some antibiotic ointment and leave the wound open.

- | | |
|--|--|
| 1. put these drugs on the table | no / put / into the cupboard |
| 2. put these used syringes on the tray | no / throw / into a waste container |
| 3. take this patient's temperature in the armpit | no / take / the rectum |
| 4. change the patient's position | no / put another pillow to raise his head and chest a little |
| 5. give the patient an injection | no / give / a tablet |

EXERCISE F. Match para-medical occupations with their definitions. *phonetic*

- | | |
|------------------------------------|--|
| 1. A radiographer | a) does routine tests of blood, urine, sputum, stools, etc. |
| 2. A medical laboratory technician | b) advises on different diets for different types of patients |
| 3. A physiotherapist | c) takes and develops X-ray pictures. |
| 4. A dietician (diet consultant) | d) fills the medical records |
| 5. A medical clerk | e) treats the patients by corrective exercise, massage and electrotherapy. |

EXERCISE G. Give the opposites of the following.

- | | |
|----------------------------|--------------------------|
| absence - <i>presence</i> | inspire - <i>expire</i> |
| deep - <i>shallow</i> | light - <i>dark</i> |
| fast - <i>slow</i> | noisy - <i>quiet</i> |
| increase - <i>decrease</i> | normal - <i>abnormal</i> |

EXERCISE H. Translate into English.

1. Poprzez oddychanie organizm dostaje tlen potrzebny do życia.
2. Pielęgniarka liczy ilość oddechów na minutę oraz notuje ich charakter, rytm, głębokość, itp.
3. Powinna liczyć tak, aby pacjent tego nie zauważył.
4. Po podaniu środków nasennych, oddech stał się wolniejszy i spokojniejszy.
5. Pacjent ma wysoką gorączkę i jego oddech jest szybki, płytki i nieregularny.
6. Proszę mierzyć temu pacjentowi TPR co 4 godziny.

1. ~~By~~ *By respiration the organism gets oxygen needed to life*
2. *The nurse counts the respiratory and records the character, rhythm, depth, etc.*
3. *She should count / the count should be made in a way that is not noticed by the patient*
4. *After administering a hypnotic drug, the breathing became slower and calmer*
5. *The patient has high fever and his respiration is very fast, shallow and irregular*
6. *Please measure the TPR of this patient every 4 hours*

BLOOD PRESSURE



Word List

- atherosclerosis
[ˌæθərəˌskliəˈrəʊsɪs]
– miażdżycza tętnic
- blood pressure [ˈblʌd ˈpreʃə]
– ciśnienie krwi
- brachial artery [ˈbrɛɪkiəl
ˈɑːtəri] – tętnica ramienna
- carry out [kæri ˈaʊt]
– wykonywać, przeprowadzać
- constant [ˈkɒnstənt] – stały, trwały
- cuff [kʌf] – mankieta
- couch [kaʊtʃ] – leżanka, kozetka
- deflate [diˈfleɪt] – wypuścić powietrze z czegoś
- diameter [ˈdaɪˌæmɪtə]
– średnica
- diastolic pressure
[ˌdaɪəˈstɒlɪk ˈpreʃə]
– ciśnienie rozkurczowe
- equal [ˈiːkwəl] – równy, jednakowy
- exert [ɪgˈzɜːt] – wywierać
- h(a)emorrhage [ˈhɛməˌrɪdʒ]
– krwotok
- inflatable [ɪnˈfleɪtəbl]
– nadmuchiwany
- inflate [ɪnˈfleɪt]
– napompować
- level [ˈlevəl] – poziom
- loss [lɒs] – utrata
- maintain [meɪnˈteɪn]
– utrzymywać, podtrzymywać
- manometer [mæˈnɒmɪtə]
– manometr
- mercury [ˈmɜːkjʊəri] – rtęć
- pump [pʌmp] – pompa; pompować
- quantity [ˈkwɒntəti] – ilość
- risk factor [ˈrɪsk ˈfæktə]
– czynnik ryzyka
- sphygmomanometer
[ˌsfɪgməˈnɒmɪtə]
– sfigmomanometr
- stethoscope [ˈsteθəˌskəʊp]
– słuchawka, stetoskop
- systolic pressure [sɪsˈtɒlɪk
ˈpreʃə] – ciśnienie skurczowe

When the heart beats, the blood exerts pressure on the walls of blood vessels. The pressure is greatest in the arteries and lowest in the veins. Blood pressure depends on the pumping force of the heart and the quantity of circulating blood. The patient's blood pressure is often taken during nursing care. This can be done using a sphygmomanometer. Blood pressure is measured in millimetres of mercury (mm Hg). Blood pressure is the greatest at each heartbeat and is called systolic pressure. Blood pressure is lowest between the heartbeats and is called diastolic pressure.

The normal systolic pressure for a middle-aged adult is between 110 to 130 mm Hg (millimetres of mercury). The diastolic pressure is usually about two-thirds of the normal systolic pressure and is rather constant; it is 70 to 90 mm Hg. The systolic blood pressure rises slightly with age. It also depends on the level of activity and excitement. In a person 20 years old, the normal systolic pressure is about 120 mm Hg and the normal diastolic pressure is 80 mm Hg.

A common circulatory problem is hypertension, which is an increase in blood pressure. It is caused by a loss of elasticity by the walls of the arteries and a decrease in diameter of the arteries. The risk factors of hypertension are atherosclerosis (deposits of fatty material on the interior walls of arteries), cigarette smoking, and lack of exercise. A decrease in blood pressure is usually the result of haemorrhage, shock and heart attack.

Two pieces of equipment are used to take blood pressure: a sphygmomanometer and a stethoscope. Before taking blood pressure the patient should be asked to lie or sit on a bed or on a couch with his right arm uncovered to the shoulder. The sphygmomanometer should be placed beside his arm and on the same level. It consists of a mercury manometer and an inflatable cuff. The cuff is put round the patient's arm and the stethoscope is applied over the brachial artery. Then the cuff is inflated until the brachial pulse disappears. Then the air is slowly released from the cuff. The first pulse beats heard when the cuff is deflated show the systolic pressure. The deflation of the cuff is continued until the last pulse sounds are heard. This shows the diastolic pressure.

In recording blood pressure, the systolic pressure is written over the diastolic, for example, BP 120/80 mm Hg (one hundred and twenty over eighty millimetres of mercury).

The patient's temperature, pulse, respiration (t.p.r.) and blood pressure (b.p.) should be taken and recorded on a chart regularly. They represent a valuable picture of the patient's condition and progress.

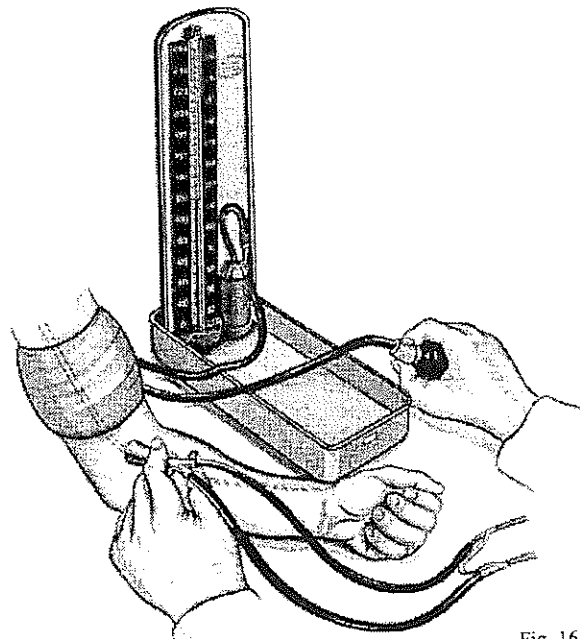


Fig. 16.
Measurement of blood pressure with a sphygmomanometer



EXERCISE A. Answer the following questions.

1. What does the blood pressure depend on?
2. What instrument is used to take blood pressure?
3. What does it consist of?
4. What is the systolic and diastolic pressure?
5. What is hypertension?
6. When is the blood pressure decreased?

EXERCISE B. Choose the best answer to complete the sentences.

1. The blood pressure is the highest in the
a) capillaries b) veins c) arteries
2. Blood pressure is measured in
a) micrometers Hg b) millimetres Hg c) centimetres Hg
3. The normal systolic pressure for an adult is mm Hg.
a) 100 – 110 b) 110 – 130 c) 130 – 160
4. Diastolic pressure is the blood pressure
a) at the heartbeats b) between the heartbeats c) both at and between the heartbeats
5. Diastolic pressure is about the normal systolic pressure.
a) one-third of b) the same as c) two-thirds of
6. is not a risk factor of hypertension.
a) atherosclerosis b) sedentary lifestyle c) allergy
7. The cuff is inflated until the brachial pulse and slowly deflated until the first pulse beats are heard.
a) appears b) disappears c) reappears

EXERCISE C. Give the nouns related to these verbs. Then, use them to complete the sentences below.

- circulate -
deflate -
excite -
measure -
press -

1. Careful of all vital signs is necessary for a clinical picture of a disease.
2. Regular exercise and proper diet improves the
3. Low blood is increased by a cup of strong coffee.
4. The news that Prof. Roberts is going to visit our hospital caused a great among hospital staff.
5. of tyres in the wheels may lead to an accident.

EXERCISE D. Match the words listed below with their definitions.

a stethoscope; a wheelchair; a sling; forceps; a syringe

1. a triangular piece of cloth hung around the neck to support a broken arm
2. a mobile chair on which an invalid can sit and move
3. a tube with a plunger which moves inside it, forcing the contents out through the needle
4. two ear-pieces connected to a tube and a metal disc, used to listen to the sounds inside the body
5. an instrument similar to a pair of scissors, used for holding and pulling

Now, use these words to complete the sentences.

1. I'm going to change the dressing. Could you pass me the
2. Mrs Wilson's broken forearm has just been put to a plaster. Now, the upper limb must be flexed and supported by a
3. Mr Walker cannot walk. You have to take him to the X-ray Department in a
4. Where are the and needles? I'll need them soon to give an injection.
5. I'm going to listen to the patient's heart and lungs. Could you pass me a

EXERCISE E. Make up dialogues as in the example. Use the list of wards and the hints given below.

Paediatric Ward; Gynaecological Ward; Neurosurgical Ward; Dermatological Ward; Ophthalmic Ward; Ear, Nose, Throat Ward (E.N.T. Ward)

Example: Visitor: Where can I find Mrs Stevenson? She suffers from neurosis.
Nurse: In the Psychiatric Ward, I suppose.

1. Jack Smith, aged 7 years / complicated measles
2. Mrs Peterson / women's disease
3. Mr Bell / disease of the eye
4. Mr Burns / laryngitis
5. Mrs Swan / disease of the skin
6. Mr Newman / cerebral stroke

EXERCISE F. Translate into English.

1. Jednym z obowiązków pielęgniarki jest mierzenie ciśnienia krwi.
2. Wyróżnia się dwa rodzaje ciśnienia krwi: skurczowe i rozkurczowe.
3. Normalne ciśnienie rozkurczowe równe jest $2/3$ ciśnienia skurczowego.
4. Sfygmomanometr składa się z rtęciowego manometru i nadmuchiwanego mankietu, który umieszcza się wokół ramienia pacjenta.
5. Ciśnienie krwi musi być zanotowane na karcie chorobowej pacjenta.
6. Proszę usiąść, podwinąć rękaw do ramienia. Zamierzam zmierzyć panu ciśnienie krwi.

TAKING MEDICAL HISTORY AND NURSING HISTORY



Word List

- admission [əd'mɪʃən] – przyjęcie
- bronchoscopy [brɒŋ'kɒskəpi] – bronkoskopia
- cause [ko:z] – przyczyna; powodować, spowodować
- chronic ['krɒnɪk] – przewlekły
- confirm [kən'fə:m] – potwierdzić
- diagnosis [ˌdaɪəg'nəʊsɪs] – diagnoza
- electrocardiogram [ɪˌlektərəu'kɑ:diəugræm] – elektrokardiogram
- endoscopic [endə'skɒpɪk] – endoskopowe
- identify [aɪ'dentɪfaɪ] – zidentyfikować
- injury ['ɪndʒəri] – zranienie, skaleczenie
- interview ['ɪntəvju:] – wywiad
- lifestyle ['laɪfstajl] – styl życia
- obtain [əb'teɪn] – otrzymać
- out-patient clinic ['aʊtpeɪʃənt 'klnɪk] – ambulatorium
- perform [pə'fɔ:m] – wykonywać
- physical examination ['fɪzɪkəl ɪgˌzæmɪ'neɪʃən] – badanie fizykalne
- physician [fɪ'zɪʃən] – lekarz ogólny
- sibling ['sɪblɪŋ] – rodzeństwo
- specialist ['speʃjəlɪst] – specjalista
- status ['steɪtəs] – stan, status
- symptom ['sɪmptəm] – objaw
- ultrasonography [ˌʌltrəsə'nɒgrəfi] – ultrasonografia

The physician performs a physical examination to find abnormalities from normal body structure and function. The physical examination is done after a medical interview. A medical interview is a conversation, during which the doctor obtains from the patient all the necessary information on his health. During an interview, the patient answers the doctor's questions, giving in this way, his health history. The doctor asks the patient about his present symptoms, the beginning of the disease and the medicines the patient has been taking (present history). After collecting the information on the present history, the doctor asks the patient about past diseases, injuries and operations (past history). Next, the doctor asks questions about the patient's family history, that is, the diseases which run in the family, causes of death of parents or siblings, presence of allergies or other chronic illnesses. Finally, the patient is asked about his lifestyle, especially his diet, exercise, sleep, recreation, use of tobacco, alcohol and drugs.

The interview and examination may take place in the physician's office before admission. If the examination is performed after admission, it may be done in the patient's room, in an examination room on the nursing unit or in the hospital's outpatient clinic. The interview and physical examination are the basis for making diagnosis and finding the cause of the illness. Sometimes specialist laboratory examinations are necessary to identify the disease or to confirm the diagnosis. The most common are: CBC (complete blood count), urinalysis, X-ray pictures, ECG (electrocardiogram), USG (ultrasonography), CT (computer tomography), endoscopic examinations, such as bronchoscopy, gastroscopy, rectoscopy, etc.

The function of the nurse is to prepare the patient for the medical examination, assist during the examination and collect the specimens for the lab tests, or to escort the patient to the laboratory.

The nurse should read the medical history and report on physical examination, paying attention to the medical diagnosis, results of diagnostic tests and prescribed treatment.

The role of the nurse is to obtain the nursing history. The nursing history is not a duplication of the medical history but includes all information necessary for the nursing care of the patient. The nurse obtains the nursing history by interviewing the patient and/or the members of his family. The nurse asks questions about the patient's daily activities, physical functions, mental state and socio-economic status. Most hospitals provide a ready-made form for the nursing history to be filled in by patients. The patient's family may provide the information that the patient cannot give. The nursing history gives additional information about the patient's health status.

EXERCISE A. Answer the following questions.

1. How is a medical history obtained?
2. Where does the medical interview take place?
3. What information does the present history include?
4. What information does the past history include?
5. What is family history?
6. Who is the nursing history obtained from?

EXERCISE B. Make questions so that the parts in bold are the answers. Then, decide whether these sentences are true or false. Correct the false ones.

1. The physical examination is performed **before a medical interview.**
2. A medical history is **a discussion on the patient's health problems.**
3. A medical interview takes place **in the patient's room in hospital.**
4. During an interview the patient is asked **about his medical and non-medical problems.**
5. The nurse should read **the patient's medical documentation.**
6. The nursing history contains **the same information as the medical history.**

social security - dowód ubezpieczenia
admission - przyjęcie



EXERCISE C. Practise the questions asked by a nurse while taking a nursing history.

- At the beginning of the interview, the nurse should focus on what is the most troublesome to the patient.

Asking about present health status

- What brought you to the hospital?
- What seems to be the problem?
- What is causing you the most discomfort?
- When did the symptoms appear?
- What were you doing when you noticed these symptoms?
- Does anything relieve these symptoms?
- Do you think you are getting better or worse?
- How do you feel now?
- What do you know about your illness or condition?
- What do you do for yourself at home when you are sick?
- How has the illness affected your life?
- What factors aggravate or help your condition?
- Are you taking any medications?
- Do you have any allergies? (to food, drugs)

What brings you here?
1. I have a cold and my fever
2. This person has allergies?
3. No
4. Are you on any other
5. I don't know
6. No any medicine

- The nurse should learn about the patient's background and experience in order to determine his needs.

Asking about past health history

- Would you tell me a little about yourself, your family, your way of life?
- What do you do to try to stay healthy?
- How do you usually react to being ill?
- Whom do you usually turn to for help?
- What type of work do you do?
- Has your illness interfered with your work?
- How do you like to be treated when you are ill?
- What activities, hobbies, and forms of recreation do you enjoy?

Smoking

- The nurse should find out what can be done to help the patient during his stay in hospital.

Asking about nursing needs

- What would you like to do to help yourself get better?
- What kind of help do you need?
- Who do you think could give this help?
- What aspects of your life are affected by your illness?
- How will your illness affect your family?
- What are your food preferences? Food dislikes?
- What are your sleeping habits?
- Do you like a night light?
- How many pillows do you sleep on?
- Would it be helpful to have a family member or friend stay with you?
- What annoys you most about being in hospital?
- What do you miss the most in the hospital?
- How long do you think you will stay in hospital?
- What could the nursing staff do to help you?

1. I would like to see
2. I would like to see
3. I would like to see
4. I would like to see
5. I would like to see
6. I would like to see

EXERCISE D. Imagine that you want to obtain the nursing history from the patient. Ask him/her about:

- The beginning of the symptoms.
- The probable cause of his condition.
- Relieving/aggravating factors.
- Family.
- Living conditions.
- Working conditions.
- Sleep habits (bedtime, duration, quality, etc.).
- Forms of recreation, hobbies, etc.
- Food likes and dislikes.
- Taking medicines.
- Expectations from the nursing staff.

1. The beginning of the symptoms
2. The probable cause of his condition
3. Relieving/aggravating factors
4. Family
5. Living conditions
6. Working conditions
7. Sleep habits (bedtime, duration, quality, etc.)
8. Forms of recreation, hobbies, etc.
9. Food likes and dislikes
10. Taking medicines
11. Expectations from the nursing staff

EXERCISE E. Translate into English.

1. Najpierw lekarz przeprowadził wywiad z chorym a potem badanie fizykalne.
2. Jak długo czuje pan ból?
3. Gdzie boli najbardziej?
4. Czy lekarstwo pomogło złagodzić ból?
5. Czy ktoś w rodzinie cierpiał na tę chorobę?
6. Czy miał pan podobne objawy wcześniej?