

Lecture 1

ORIENTATION TO MEDICAL TERMINOLOGY

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Lecture outline

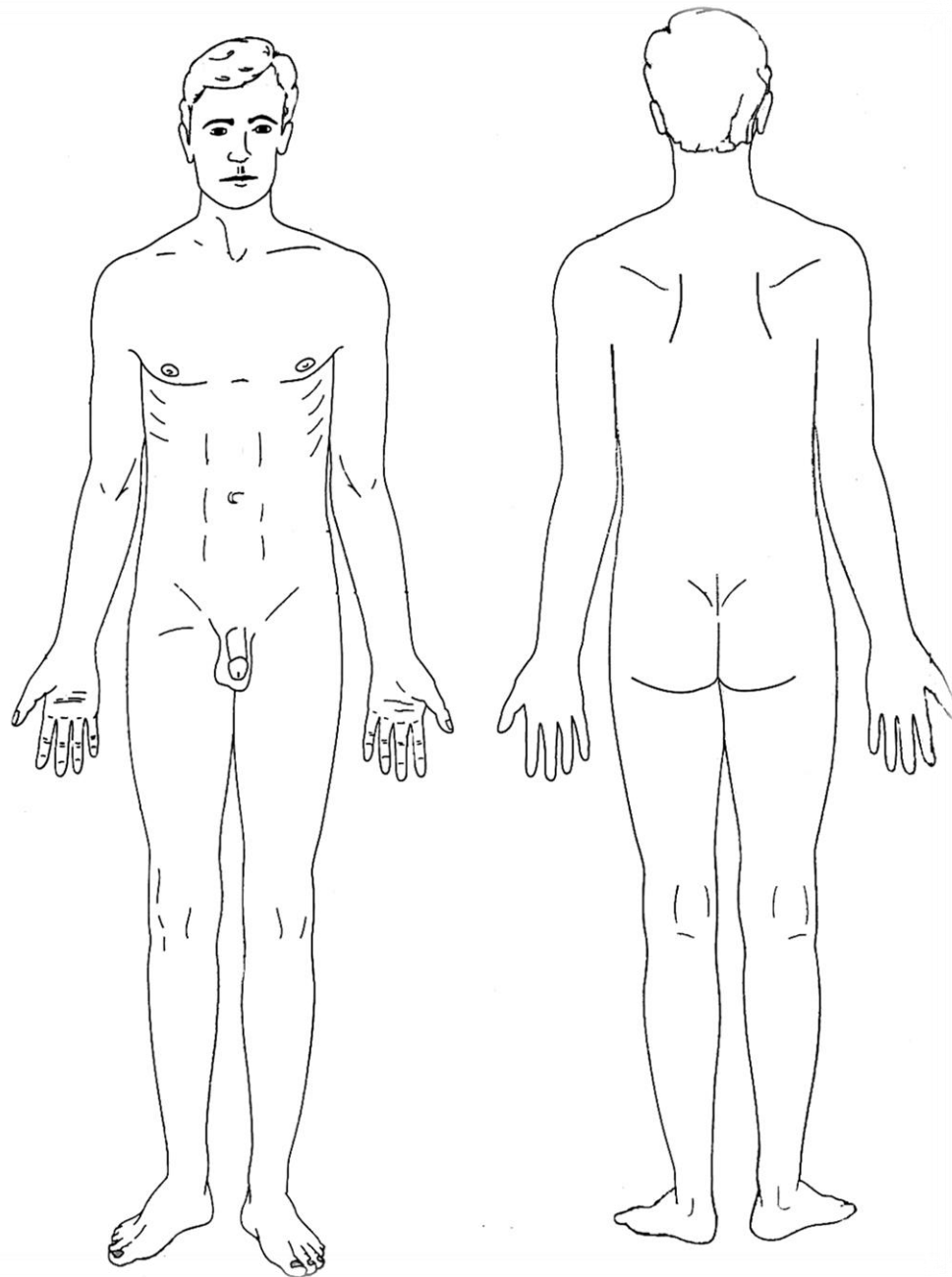
- I. Objectives of studying medical language
- II. Word elements and word structure
- III. Medical term analysis using basic word elements
- IV. Combining forms, prefixes and suffixes
- V. Practice

Lecture objectives

- define the basic parts of a medical term (root, suffix, prefix, combining form, combining vowel)
- learn to divide medical words into their component parts;
- identify the basic parts of a medical term;
- learn basic combining forms;
- use these combining forms to build and analyze medical words;

I. Objectives of studying medical language

- 1). To analyze words structurally
- 2). To correlate an understanding of words elements with the basic anatomy, physiology, and disease processes of the human body
- 3). To be aware of spelling and pronunciation problems



**Blood, bone, brain, cancer,
cell, ear, eye, gland, heart,
intestines, joint, kidney,
mouth, nerve, skin,
stomach, tumor, urine**

Do the word search. Find 10 words denoting parts of the body

A	E	B	S	B	I	N	T	E	S	T	I	N	E
E	A	F	K	F	C	H	K	C	I	C	O	E	A
B	R	A	I	N	K	A	C	L	A	A	F	R	L
G	D	G	N	E	H	E	N	G	E	T	Q	V	A
A	P	D	G	O	A	M	T	I	S	S	U	E	H
G	A	R	N	T	D	Q	S	P	D	U	F	S	I
D	D	F	H	E	A	R	T	D	U	A	V	A	U
I	A	S	R	Y	F	O	O	P	L	X	H	Z	R
D	T	A	H	E	K	F	M	O	U	T	H	R	I
N	M	S	R	Q	F	M	A	V	E	W	P	G	N
O	L	I	V	E	R	B	C	B	B	E	B	O	E
G	C	D	C	I	C	N	H	E	I	C	M	E	L

II. Word elements and word structure

What is a term?

What is a word root?

What is a prefix?

What is a suffix?

What is a combining vowel?

What is a compound word?

Пар

Паровий

Пропарити

Пароплав

III. Medical term analysis using basic word elements

CARDITIS		
	Card	itis
<i>Meaning</i>	Heart	Inflammation
<i>word element</i>	Word root	Suffix

ENDOCARDITIS

	Endo	Card	itis
<i>Meaning</i>	Within	Heart	Inflammation
<i>word element</i>	Prefix	word root	suffix

CARDIOLOGY

	Cardi	o	logy
<i>Meaning</i>	Heart		Study of
<i>word element</i>	Word root	Combining vowel	Word root
	combining form		

OSTEOARTHRITIS

	Oste	o	arthr	itis
<i>Meaning</i>	Bone			
<i>word element</i>	Word root	Combining vowel	Word root	Suffix

LITERARY MEANING V.S. DEFINITION

TERM	LITERARY MEANING	ENCYCLOPEDIA DEFINITION
Arthritis	Inflammation of the joint	any inflammatory condition of the joints, characterized by pain and swelling
Cardiology	Study of the heart	the study of the anatomy, normal functions, and disorders of the heart

BASIC RULES

- A word root provides the basic meaning of the term.

*Example: **hepat-** means liver in the term **hepatitis** (inflammation of the liver)*

- A prefix appears before the word root to change the meaning.

*Example: **adding of prefix hypo** to the term **dermic** changes the meaning from **pertaining to the skin** to **pertaining to below the skin***

- A suffix appears at the end of the word.

*Example: **in the term hepatitis** suffix **itis** which means **inflammation** is added to the root **cardi-**.*

- A combining vowel connects word roots.

*Example: **laryngoscope** – **o** connects two roots: **laryng-** and **-scope** in the word meaning **instrument for visual examination of the larynx** (voice box)*

- A combining form consists of a word root and a combining vowel.

*Example: **hepat + o = hepato** (a combining form meaning liver)*

- A combining vowel is not used before suffixes and roots beginning with a vowel, but is used between two roots in a compound word.
- The meaning of a medical term can be determined by starting with the suffix and moving back to the beginning of the word;

*Example: **hepatitis** means **inflammation (itis)** of the liver (**hepat**)*

IV. Combining forms, prefixes and suffixes

cardio - heart

hepato - liver

gastro - stomach

entero - intestine

ophthalmo - eye

oto - ear

dermato - skin

stomato - mouth

neuro - nervous system

uro - urinary system

gyneco - woman

histo – tissue

radio - rays

onco - tumor

bio – life

-logist - specialist

-logy - science

Ukrainian	Latin	English
-логія	logia	-logy epidemiology
-лог		-logist pathologist
-іт	itis	-itis bronchitis
-патія	pathia	-pathy cardiopathy
-оз	osis	-osis spondylosis
-скопія	scopia	-scopy colonoscopy
-графія	graphia	-graphy urography
-томія	tomia	-tomy craniotomy
-ектомія	ectomia	-ectomy gastrectomy
-стомія	stomia	-stomy enterostomy
-мегалія	megalia	-megaly hepatomegaly
-плазія	plasia	-plasia dysplasia

V. Practice

Match the following terms with their definitions:

Cardiologist	Science dealing with the diseases of the mouth
Hepatology	Science about life
Gastroenterology	Specialist in eye diseases
Ophthalmologist	Specialist in heart diseases
Biology	Study of the liver
Stomatology	Science about the digestive system

ANSWERS

- Cardiologist - Specialist in heart diseases
- Hepatology - Study of the liver
- Gastroenterology - Science about the digestive system
- Ophthalmologist - Specialist in eye diseases
- Biology - Science about life
- Stomatology - Science dealing with the diseases of the mouth

Give the medical word:

1. One who specializes in the study of the nervous system
2. Branch of medicine dealing with the use of x-rays
3. Specialist in eye diseases
4. Branch of medicine dealing with skin diseases
5. One who specializes in the study of the liver

ANSWERS

- Neurologist
- Radiology
- Ophthalmologist
- Dermatology
- Hepatologist

Explain medical words:

E.g. Cardiology is the study of the heart.

Cardiologist is a specialist in heart diseases.

Neurology

Ophthalmology

Gynecology

Dermatologist

Urologist

Stomatology

Hepatology

Radiologist

Gastroenterology

Histology

Oncologist

Microbiology

*Read the definitions of medical professions and fill in the gaps
with the word:*

**Psychiatry, science, internal, specialist, care, specializes,
diseases, medical, physician, women**

- a) **Surgeon**, medical _____ performing operations
- b) **Pediatrician**, specialist in _____ of children
- c) **Internist**, doctor who _____ in the diseases of the
_____ organs
- d) **Physician**, licensed _____ doctor
- e) **Nurse**, one who is trained to _____ for the sick
- f) **Obstetrician**, _____ who specializes in pregnant
_____.
- g) **Psychiatrist**, one who specializes in _____.
- h) **Dentist**, one who specializes in the _____ of
dentistry

ANSWERS

- a) **Surgeon**, medical **specialist** performing operations
- b) **Pediatrician**, specialist in **diseases** of children
- c) **Internist**, doctor who **specializes** in the diseases of the **internal** organs
- d) **Physician**, licensed **medical** doctor
- e) **Nurse**, one who is trained to **care** for the sick
- f) **Obstetrician**, **physician** who specializes in pregnant **women**.
- g) **Psychiatrist**, one who specializes in **psychiatry**.
- h) **Dentist**, one who specializes in the **science** of dentistry

Write the names of sciences and professions:

_____ – PEDIATRICS

_____ – OBSTETRICS

_____ – NURSING

_____ – INTERNAL MEDICINE

PSYCHIATRIST – _____

DENTIST – _____

_____ – SURGERY

Analyze the terms:

- **Neurosurgery**
- **Cardiosurgery**
- **Radiobiology**

Write the combining forms:

arteries

bladder

bones

brain

bronchi

cartilages

esophagus

gallbladder

heart

intestine

joint .

kidneys

liver

lungs

muscle

nerves

ovary

pancreas

spinal cord

stomach

testis

trachea

ureter

urethra

uterus

veins

BUILD MEDICAL WORDS:

1. condition of no skin, 2. pertaining to the opposite side, 3. bad nourishment, 4. pertaining to a half of the tongue, 5. condition of many fingers, 6. condition of small heart, 7. bad formation, 8. instrument to view small things, 9. condition of small fingers, 10. complete atrophy,

ANALYZE THE WORDS:

11. pancytopenia, 12. polyarthritiis, 13. incapacity 14.
postencephalitic, 15. pseudoanemia, 16. endocrine, 17.
subglossal, 18. suprarenal, 19. supersonic, 20.
synostosis

Recommended literature

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