

CLINICAL TERMINOLOGY

GM 10

Content

- Introductory information.
- Prefixes.
- Stems and suffixes.

Introduction

- Latin Medical Terminology (LMT) is based on two languages: Latin and Greek.
- Latin provides the LMT with vocabulary (above all anatomical one) and extensive grammar (declensions etc.).
- Greek offers a bit of grammar and an extensive set of Greek prefixes, stems, and suffixes.

- The fundamental difference between Latin and Greek lies in the way how they connect words together.
- Latin prefers linking single independent words using grammatical features like genitive case and adjectival modifier/attribute.
- Greek, on the other hand, has a great ability to merge words together to create complex one-word expressions.

Comparison

- **Latin**

- cancer musculi
- inflammatio venarum
- dolor capitis
- inflammatio renum
- excisio uteri

- **Greek**

- myoma
- phlebitis
- cephalalgia
- nephritis
- hysterectomy

- Greek expressions have following advantages:
 - They are usually shorter.
 - They could consist of several parts (i.e. *cheilognatopalatoschisis*). This allows us to describe a particular pathology or situation very precisely.
 - They use usually very simple grammar. Endings of Greek expressions are latinized and adopt form of the 1st, 2nd and sometime also *dolor* paradigm (3rd decl.).

Structure of Greek clinical terms

- Composite Greek medical terms consist of three main parts:
 - **Prefix** (not necessary).
 - **Stem** (there could be several stems linked together).
 - **Ending** (ending could be of Greek origin, but it always adopts a Latin grammatical form).

Demonstration

endo-
(inside)

cardi(o)-
(heart)

-itis
(inflammation of)

endocarditis

inflammation of inner wrapping of heart -
endocardium

epi-
(outside)

derm(o)-
(skin)

-lysis
(decay, degeneration)

epidermolysis

degenerative disease of skin

Comments

- The concept is very simple: just connect prefixes, stems, and endings together.
- Every expression may have one or more prefixes. But many terms do not include a prefix at all. (*myos/itis, neur/osis, oste/oma, etc.*)
- Every term has at least one (or more) stem(s) and one ending.
- The ending uses Latin grammar despite its Greek origin.

- Stems look like this:
 - *stoma-*
 - *oste(o)-*
 - *nephr(o)-*
 - *dermat(o)-*
 - *hyster(o)-*
- The dash “-” in the end signify the fact that it is only a stem, and not the whole word.
- We never use stems without endings. Only with proper ending (which is declinable) a valid clinical term is created.

- The “(o)” in parentheses serves as a connective instrument.
- Generally if an ending or following stem begins with a consonant, then the “o” is inserted. If it starts with a vowel, the “o” is omitted.
- Example:
 - *dermat(o)- + -pathia = dermatopathia*
 - *dermat(o)- + -itis = dermatitis*
- Not all stems have this connective “o”.

- Several stems can be chained together thus creating more specific expression:
 - *cardi(o)- + myos- + -pathia = cardiomyopathia*
heart + muscle + disease = **disease of muscle of heart**
 - *chole- + doch(o)- + lith(o)- + -iasis = choledocholithiasis*
bile + tube + stone + non-inflammatory disease =
non-inflammatory disease of tubes which lead bile
 - *leuc(o)- + cyt(o)- + -penia = leucocytopenia*
white + cell + insufficiency =
insufficient amount of white cells

- Few stems can cause difficulties:
 - *myos* (muscle) is sometimes used as whole (*myos/itis*) and sometimes just *my-* is employed (*my/algia*)
 - do not confuse previous with *myel(o)-* (marrow), *myel/oma*
 - *o(o)-* means egg, *oo/phor/itis*
 - do not confuse with *ot(o)-* (ear), *ot/itis*
 - ending *-tomia* means surgical intervention and *-ectomy* means surgical removal (excision).

- Latin and Greek forms are **not** interchangeable. You can't use Greek stems in Latin grammatical context.
- For example, it is not allowed to replace word “*inflammatio*” with simple “*-itis*”.
- However it is possible to substitute “*inflammatio cutis*” with “*dermatitis*”. Because it is a complete expression, there is at least one stem and one ending.
- Accordingly inside Greek terms there must be Greek stems and endings. So *phlebitis* (from Greek *phleb(o)-*) can't be replaced with *venitis* (from Latin *vena*). “*Venitis*” is incorrect.

Grammar

- All the endings are subject of grammar and therefore belong to a declension.
- It can be the 1st declension:
 - pathia*, *ae f.*; *nephro/pathia*
 - ectomia*, *ae f.*; *splen/ectomia*
 - algia*, *ae f.* *neur/algia*
- or the 3rd declension:
 - itis*, *itidis f.*, *hepat/itis*
 - osis*, *osis f.*, *acid/osis*
 - oma*, *omatis n.* *myel/oma*
- or rarely the 2nd declension:
 - ismus*, *i m.* *alcoholismus, albinismus*