
THE TERMINOLOGICAL *NOMEN* IN CLINICAL TERMINOLOGY – NOMINATION, DENOTATION AND SOMETHING MORE

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Abstract: Clinical terms constitute the biggest part of the medical terminology. Their vast number and variety as well as the dynamic overall development of the clinical sphere of medicine, make it difficult to assess, systematize and use them correctly. Understanding the mechanism of formation of these clinical terms requires excellent knowledge and understanding of this part of terminology both from a synchronic and diachronic perspective. In principle when it comes to terminological nomination, the same methods (lexico-morphological, lexico-semantic and lexico-syntactic) are used as in linguistic nomination. But when medical terms are concerned and especially the ones related to clinical studies, there exists a very significant difference in relation to the other spheres of terminology. The terminological nominations are constructed with the help of term formation methods of two languages – Latin and Old Greek due to the birth and development of Medicine in the historical context of Ancient Greece and Rome.

The definitions of *termin* clearly pronounce its signifying nature, that is its function to *denote* a concept of the nominated object, as well as its close scientific (or technical/medical) specificity. This poses a lot of questions before researchers, questions associated with the specific connection of these terms to the content of the concept and its terminological nomination as well as the information implied in the terminological *nomen*. The objects of the study are terminology words and terminology collocations that denote pathological phenomena, conditions, symptoms, syndromes, nosological units, etc. The pathoanatomical and clinical terms analysis shows the extremely high level of informativeness of their names, as well as a great variety of constructive characteristics implied in them and a diversity of terminological patterns. The cause of the disease or the condition may be pointed out in these terms (e.g. *ischaemia* – “cessation of blood flow”), the pathological problem may be registered (e.g. *haemostasis* – “blood stagnation”), the manifestation and symptoms of a disease may be described (e.g. *cyanosis* – “bluish discoloration of the skin”), a more imaginative account of the disease or condition may be given (e.g. *cataracta* – “waterfall”), sounds, similar to the pathological phenomenon may be uttered (e.g. *gutta cadens* – “falling drop”) or allusions can be made to mythological or literary characters whose fate or traits are associated with unusual and abnormal behavior denoted by the concept (e.g. *Oedipus complexus* – “Oedipus complex”).

The in-depth analysis of the terms displays that not only do they designate clinical concepts but they also point out various aspects of their content, they emphasize important parts of it, they compare or contrast phenomena and specifics, they turn back to the primitive collective consciousness reflected in mythology or they reveal mistakes that had been hidden or forgotten for a long time.

Keywords: terminology, clinical terms, terminological *nomen*, pathological phenomena, metaphors

1. INTRODUCTION

Functioning clinical terms constitute a huge amount. It is estimated that the number of clinical terms (diseases, symptoms, signs, treatment, procedures, etc.) amounts to ca. 80,000 (Kondratyev and Ryabova, 2011). The truth is that their number is very difficult to calculate. There are several reasons for this. The dynamics in the development of clinical medicine leads to the continuous formation of new terminological units. The terms are coined and used within clinical science and practice in different countries without going through mandatory standardization and unification procedures. Therefore, very often their use is not universal and they cannot be covered by calculations, observations and analyzes. Clinical terminology is not only numerous but also distinguished by the extreme diversity of its concepts. It includes terms for pathological abnormalities and disorders in the construction and functioning of organs and systems, terms related to clinical medicine – terms for diseases, diagnostics, therapy, prophylaxis, patients, specialists, equipment and more. Its millennial development on the basis of ancient Greek and Latin is the reason for both the diversity of the linguistic means by which the terminological names are constructed, as well as the figurative and cultural implications in them.

This paper aims to analyze the specificity of terminological *nomen* in clinical terms of abstract nature. The objects of the study are terms (words and phrases) for nosological units, pathological abnormalities, clinical conditions, symptoms, syndromes, etc.

2. TERM FORMATION AND CREATION OF TERMINOLOGICAL NAMES

Term formation is a complex process of creating a term that involves three different in nature but related activities – scientific, logical and linguistic. They mark the three stages of creating a term:

- 1) *identification* – analyzing the scientific object or phenomenon and determining its parameters;
- 2) *conceptualization* – logical formulation of the concept, establishing its content and formulating its definition;
- 3) *nomination* – the linguistic stage of the formal elaboration of the terminological nomen. Popova names this stage a terminological nomination and regards it as a specific case of the lexical nomination (Popova, 2012: 267).

3. MECHANISMS OF THE TERMINOLOGICAL NOMINATION

The mechanisms of terminological nomination replicate the mechanisms of linguistic nomination, using three types of linguistic means:

- ◆ *Lexical-morphological means* - through them the root, affixal and compositional term formation is accomplished;
- ◆ *Lexical semantic means* - the most used semantic techniques for terminological nomination are metaphor and metonymy;
- ◆ *Lexical-syntactic means* - terminological phrases are coined as the result of those.

“The vocabulary of medical language reflects its development over time, starting with the ancient Greeks, who were among the first to study and write about medicine. The Romans continued this practice, adapting elements of the Greek language to use alongside Latin. Today we can see the historical roots of medical language in the use of terms, build from Greek and Latin word parts”. (LaFleur Brooks, D., LaFleur Brooks, M., Levinsky, D. 2019).

Clinical terminology is a product of two-language word-formation methods – Latin and Ancient Greek. Therefore, for many centuries, terminological material has been created in the context of ancient Greek and Roman culture through a unique combination of word-forming tools in both languages. Their exceptional ability to economically express scientific concepts and organize them into a coherent terminology system is the reason for using them as traditional languages of medical terminology to this day.

4. SIGNIFICATIVE CHARACTERISTIC NATURE AND FUNCTION OF THE CLINICAL TERM

In order to clarify the nature and function of the clinical term, we must look up modern definitions for the broader notion of term. "The term is a word or a stable word combination, meaning exactly the concept of the named object and characterized by the utmost pursuit of uniqueness, narrow scientific (or technical) specialization and internationally recognized use" (Kasabov 2019).

Popova defines the term as a language sign (word or phrase), which defines a notion in a particular scientific or technical field and is different from the commonly used words in function – used in the so-called Languages for Specific Purposes (LSP). To fulfill this role, its meaning must be given by a definition (Popova, 2012: 26).

In modern conceptions of the notion "term", the term clearly stands out for its significative nature, that is, its function to signify a concept for the named object, as well as its narrow scientific (or technical) specialization. However, this does not mean that the term is a linguistic substitute for the scientific concept. It is a two-component unit combining an onomasiological (formal) and conceptual-semantic (content) aspect. According to Kancheva, unlike other language units, "the terms have not only a nominative but also a definitive function" (Kancheva, 2009). As a linguistic sign, the term has two aspects of its meaning – denotative (giving a meaning) – functioning as the name of the object and significative (signifying) – delineating its parameters and distinguishing it from other objects. The predominance of each of the two aspects depends on the nature of the concepts defined and the degree of their specificity or abstractness. Subject clinical terms denoting material objects fulfill both denotative and signifying function, that is, at the same time they designate clinical objects and scientific concepts for them, including the generic features of the general category of subject referents. Abstract nouns in clinical terminology have rather a significative function, since their meanings have arisen through abstraction (*abstractio* (L.) – going away from) and synthesis (*synthesis* (Gk.) – combining, fusing together) of the essential characteristics of the concepts of intangible objects, activities, properties, categories, relationships, states. Due to their distancing from the specifics of the referents, they cannot denote, but only mean, the concepts for these objects.

5. TERMINOLOGICAL NOMEN AND THE MEANING OF THE CLINICAL TERM

What is the terminological nomen of the clinical term?

When analyzing the terms, the great variety of constructive features included and the variety of terminological models are striking. The very high level of informativeness of their titles is particularly noticeable. The reason for

this is the strong connection between the content of the term and the terminological name – the nomen itself contains information revealing features of the content of the term. Many language signs do not just mean concepts, they describe, depict, or compare them. In the course of the clinical nomination, differences in the informativeness of the clinical names were distinguished. On this basis, we divide them into several terminological groups: defining terms, imaginative-sensory terms, and terms-allusions.

1) **Defining terms** – so called because the terminology works similarly to a definition – it identifies and combines certain characteristics of the content that give an idea of the concept or certain aspects of it. To see the similarities, let's compare Sagger's definition of "... the definition is a linguistic description of the concept, based on the listing of a number of characteristics, which conveys the meaning of the concept" (Sager, 1990). In this sense, it can be argued that the defining terminological function in clinical terms comes first by their very name. For this reason, their definition is much more pronounced than in other medical terms. The signification is done by a linear-verbal technique that directly connects with the real object, by "taking out" certain elements of the concept on the surface and incorporating them in the formation of the terminological *nomen*. The names are constructed by lexicomorphological methods - mainly affixation and composition. They can reflect the following features of the concept:

◆ *A pathological problem, e. g.:*

term	literal meaning in terminological nomen	etymology
haemostasis	„blood stagnation“	< <i>haemo-</i> (Gk.) blood + <i>-stasis</i> (Gk.) stoppage
<i>definition:</i> "1. Arrest of bleeding; 2. Arrest of circulation in a part; 3. Stagnation of blood." (Medical Dictionary for the Dental Professions, 2012).		
neuralgia	„pain of a nerve“	< <i>neuro-</i> (Gk.) nerve + <i>-algos</i> (Gk.) pain
<i>definition:</i> "An abnormal condition, characterized by severe stabbing pain , caused by a variety of disorders affecting the nervous system". (Mosby's Pocket Dictionary of Medicine, Nursing & Health Professions, 2019).		
spondylomalacia	„softening of vertebrae“	< <i>spondylo-</i> (Gk.) vertebra + <i>malakia</i> (Gk.) softening
<i>definition:</i> "Softening of the vertebrae." (Farlex Partner Medical Dictionary, 2012).		
polydactylia	„many fingers (more than 5)“	< <i>poly-</i> (Gk.) many + <i>dactylos</i> (Gk.) finger
<i>definition:</i> "Presence of more than five fingers or toes on hand or foot." (Medical Dictionary for the Health Professions and Nursing, 2012).		

◆ *The cause of the disease or condition, e.g.:*

term	literal meaning in terminological nomen	etymology
ischaemia	„cessation of blood flow“	< <i>isch-</i> (Gk.) cessation + <i>-aemia</i> (Gk.) blood
<i>definition:</i> "Local loss of blood supply due to mechanical vascular obstruction". (Medical Dictionary for the Dental Professions, 2012).		
hypoglykaemia	„low blood sugar“	< <i>hypo-</i> (Gk.) low, little + <i>-aemia</i> (Gk.) blood
<i>definition:</i> "Deficiency of glucose concentration in the blood which may lead to nervousness, hypothermia, headache, confusion, and sometimes convulsions and coma". (Dorland's Pocket Medical Dictionary, 2018).		
hypothyroidismus	„decreased thyroid function“	< <i>hypo-</i> (Gk.) low, less than + <i>thyroid-</i> (Gk.) thyroid gland + <i>-ismus</i> (Gk.) state, condition
<i>definition:</i> "Diminished production of thyroid hormone, leading to clinical manifestations of thyroid insufficiency, including low metabolic rate, tendency to gain weight, somnolence, and sometimes myxedema." (Farlex Partner Medical Dictionary, 2012).		
hyperkeratosis	„undue thickening“	< <i>hyper-</i> (Gk.) more than, undue + <i>kerat-</i> (Gk.) horny substance + <i>-osis</i> (Gk.) process
<i>definition:</i> "Undue thickening of the outer layer of the skin so that a dense horny layer, such as a corn or callosity, results." (Collins Dictionary of Medicine, 2004, 2005).		

◆ *Certain disease symptoms, e.g.:*

term	literal meaning in terminological nomen	etymology
acromegalia	„enlargement of peripheral parts“	< <i>acro-</i> (Gk.) limb + <i>-megalia</i> (Gk.) enlargement
<i>definition:</i> "A disorder marked by progressive enlargement of peripheral parts of the body, especially the head, face, hands and feet, resulting from excessive secretion of somatotropin" (Farlex Partner Medical Dictionary,		

2012).		
prosopagnosia	“inability to recognize faces”	< <i>prosop-</i> (Gk.) face + <i>a-</i> (Gk.) lack of + <i>-gnosis</i> (Gk.) recognition
<i>definition:</i> “Inability to recognize the faces of other people or one's own features in a mirror, due to damage to the underside of both occipital lobes.” Miller-Keane Encyclopedia and (Dictionary of Medicine, Nursing, and Allied Health, Seventh Edition, 2003).		
exophthalmus	“protrusion of eye ball“	< <i>ex-</i> (Gk.) out of + <i>ophthalmos</i> (Gk.) eye
<i>definition:</i> “Protrusion of one or both eyeballs; can be congenital and familial, or due to pathology, such as a retroorbital tumor (usually unilateral) or thyroid disease (usually bilateral).” (Medical Dictionary for the Health Professions and Nursing, 2012).		

2) **Imaginative-sensory terms** – the terminological name recreates the image of the disease, condition or its symptomatology by projecting picture-specific characteristics of it. The connection between the term and the name is not made directly by verbal description, but is mediated by an image in which the pathological phenomenon is compared and thus identified. The nominative technique for creating imaginative-sensory terms is mostly a metaphor and much less metonymy or comparison. After the mental establishment of similarities and the link between two objects, the name is transferred from the more familiar and accessible sphere to the more unfamiliar, difficult to access or from the subject area to the abstract one. On the one hand, this nomination technique provides a name for the new concept using the principle of nominative economy, and on the other, it has a characterizing function that helps to familiarize the world. The concept of metaphor is multifaceted and dynamic. Its first definition belongs to Aristotle – “Metaphor is the application of an alien name by transference either from genus to species, or from species to genus, or from species to species, or by analogy, that is, proportion”. (Aristotle XXI 1457 b). In traditional linguistics, metaphor is considered as means of semantic nomination – the transfer of a name based on mentally established similarities. Representatives of the cognitive theory of metaphor view it as a mechanism of thinking. In their book “Metaphors We Live By”, Leukoff and Johnson evaluate it as a way of structuring the concept system in *image schemas*. (Lakoff and Johnson, 1980). According to them, the metaphorical model is the transfer of the name of the denotate from the source area to the denotation of the target area, resulting in mapping of the meaning of the first character on the second. Later, the conceptual metaphor theory was supplemented by Fauconnier and Turner's (2003) *conceptual blending theory* and became the subject of research from the perspective of various sciences - linguistics, literary studies, philosophy and rhetoric, psychology, psycholinguistics, anthropology, theology, etc.

Metaphors in medical terminology appear by rethinking commonly used lexical units. Source image schemas that structure concepts use different images of the surrounding reality:

images of reality	term and meaning	etymology
<i>nature objects and phenomena</i>	cataracta – <i>cataract</i> – “An opacity of the cristalline lens of the eye, or its capsule”. (Dorland's Pocket Medical Dictionary, 2018).	< <i>katarakta</i> (Gk.) waterfall
<i>plants</i>	hordeolum – “Stye; a localized purulentinflammatory infection of a sebaceous gland (meibomian or zeisian) or the eyelid”. (Dorland's Pocket Medical Dictionary, 2018)	< <i>hordeolum</i> (L.) barley
<i>animals</i>	bulimia – “Eating disorder with binge eating followed by vomiting, purging and depression” (Chabner, D-E. 2017).	< <i>bus</i> (Gk.) ox + <i>limos</i> (Gk.) hunger
<i>everyday life objects and phenomena</i>	ascites – “An abnormal peritoneal accumulation of a fluid containing large amounts of protein and electrolytes”. (Mosby's Pocket Dictionary of Medicine, Nursing &Health Professions, 2019)	< <i>askos</i> (Gk.) skin bag-like formation
<i>colours</i>	erythema – “Redness or inflammation of the skin or mucous membranes that is the result of dilation and congestion of superficial capillaries”. (Mosby's Pocket Dictionary of Medicine, Nursing &Health Professions. (2019).	<i>erythros</i> (Gk.) red
<i>qualities</i>	stenosis – „A constriction or narrowing of a duct or passage; a stricture“. (The American Heritage® Medical Dictionary, 2007).	< <i>stenos</i> (Gk.) narrow + <i>-osis</i> (Gk.) state, condition
<i>actions and activities</i>	erosio – “The superficial destruction of a surface by friction, pressure, ulceration, or trauma”. (The American Heritage® Medical Dictionary, 2007).	< <i>erosio</i> (L.) erosion, fret < <i>erodo, ere</i> (L.) nibble, bite

There are also image-sensory terms in which metaphorical transmission is of a different kind, and therefore we regard them as special cases of metaphorical terms:

♦ **Sound-imitating terms** – they create a sound image in the terminological name by resembling sounds similar to those of a pathological phenomenon, e.g. *gutta cadens* (L.) < (literally, a falling drop) – a symptom in patients with pneumothorax (presence of air or gas in the lungs), heard on auscultation – it is clear from the name of the disease that the sound produced by the lungs is reminiscent of dripping;

♦ **Terms that create a sense of feeling**, e.g. *globus hystericus* (< *globus* (L.) + *hystericus* (L.) hysterical, manifested in hysteria) – “the sensation of having a lump in the throat which cannot be swallowed. This is due to an abnormal constriction of the muscles surrounding the lower part of the throat (pharynx) and is a feature of acute anxiety, depression or mental conflict.” (Collins Dictionary of Medicine, 2004, 2005). The sensation of suffering from such a disorder of perception is clearly represented by the image of a ball in the throat.

Terms containing comparisons can also be defined as imaginative-sensory, e.g. *eunuchoidismus* (< *eunuchos* (Gk.) eunuch + *-eides* (Gk.) similar + *-ism* (Gk.) suffix denoting a deviation from the norm) – „a state in which testes are present but fail to function normally; may be of gonadal or pituitary origin“ (Farlex Partner Medical Dictionary, 2012).

3) Term allusions – in their terminological nomen reference is made to mythological or literary characters whose characteristics or fate are reminiscent of an unusual or abnormal phenomenon or behavior denoted by the term (e.g. *Oedipus complexus*). Thus, by mentioning gods or characters (mythological and literary), the necessary subtext is introduced into the name of the term, without the need for long explanations. It is no coincidence that most terms of this kind are terms for mental and psychosomatic illnesses, disorders, symptoms and syndromes that are particularly difficult and long to describe in the field of clinical psychology and psychiatry. Elements of the concept are involved in the construction of the terminological name, but they are not projected directly on it, as in the terms-definitions, nor are images of the surrounding reality used, as in the *image-sensory terms*. The names are created by analogy with the mythological and literary characters and plots that underlie European civilization. Their imagery is culturally conditioned, which is why their message is universal. In this way no individual images, but whole image schemas and models deeply embedded in the collective consciousness are designed. Like the metaphor, allusion is *a way of getting to know reality and a means of terminological nomination*. Unlike the metaphor, allusion does not induce in the terminological nomen the image that reveals the concept, but refers to something like a universal source that stores a detailed illustrated narrative of the object. If, in turn, we have to express ourselves figuratively, as a nomination mechanism allusion is something like a footnote referring to the source.

To create the linguistic signs themselves, lexico-morphological means (in terms of words) or lexico-syntactic means (in word combinations) are used. Most characteristic of their linguistic form is its eponymous character - it contains a personal name (*Electra complex*, *Rapunzel syndrome*), a term element from a personal name (*Narcissismus*), a nickname (*Sleeping Beauty Syndrome*) or a generalizing name designating a whole group of similar deities or creatures of mythology (*gigantismus* < *gigant-* < *gigas*, *antos* – giant; *nymphomania* < *nymph(o)-* < *numphē*). Unlike conventional eponyms that abound in clinical terminology, the names of these terms are highly informative and draw attention to the meaning of the term, rather than general information about the discoverer, patient, or place where the phenomenon was registered. Thus, two types of term-allusions emerge:

a) *Terms motivated by characters and plots in ancient Greek or Roman mythology:*

erotomania – pathological hypersexuality (< *Erōs*, *Erōtos* – Eros, the god of love);

hypnophobia – irrational fear of falling asleep (< *Hypnos* - Hypnos, the god of sleep);

Electra complexus – Electra complex – „the Freudian concept, complementary to the Oedipus complex, featuring the sexual attraction of a female child for her father“ (Collins Dictionary of Medicine, 2004, 2005). The term comes from the name of Electra, the daughter of Agamemnon, who takes revenge for the murder of her father at the cost of her own life. The complicated fate of the mythological heroine draws on the unconscious attraction of a girl of a similar complex to her own father and his rivalry with the mother for his attention..

b) *Terms motivated by literary characters and plots:*

Dorian Gray syndrome (DGS) – excessive criticality of the person to his appearance and painful dedication to the fight against old age. The reference is to the character of Oscar Wilde in the novel *The Picture of Dorian Gray* (1891), who sells his soul so that his portrait grows old instead of his body.

Sleeping Beauty Syndrome – is a term for a rare neurological disorder characterized by periods of prolonged sleep and behavioral and cognitive problems. The symbolism that the fairy tale character contains is an allusion to the pathological state of long sleep. The disease is also known as Klein-Levin syndrome. In this case, it is very easy to compare with the other term for the disease – Klein-Levin syndrome, to notice the difference with conventional eponyms in terms of information.

Mythologically-eponymous and literary-eponymous terms are at the same time highly informative, economical and communicatively oriented, because through symbolism and thought-schematics, sensory images and pictures are created, telling whole stories, and thus interactive models with embedded information are created.

6. CONCLUSION

A thorough reading of the terms shows that they not only name clinical concepts, but lead us to different aspects of their content, focus on important points from it, compare or differentiate phenomena and characteristics, bring us back to the primitive collective consciousness reflected in mythology, or reveal long-hidden and forgotten mistakes. The study of terminology is of cognitive, general cultural and didactic importance in the discourse of academic medical education.

REFERENCES

- Aristotle. ed. R. Kassel, Aristotle's Ars Poetica. Oxford, Clarendon Press. 1966. Retrieved 30 January 2019, <http://data.perseus.org/citations/urn:cts:greekLit:tlg0086.tlg034.perseus-grc1:1457b>
- Chabner, D-E. (2017). *The Language of Medicine*. St.Louis, Missouri: Elsevier. p. 2, 936
- Collins Dictionary of Medicine*. (2004, 2005). Retrieved November 14 2019 from <https://medical-dictionary.thefreedictionary.com>
- Dictionary of Medicine, Nursing, and Allied Health, Seventh Edition, 2003
- Dorland's Pocket Medical Dictionary*; 30th ed. (2018). Elsevier, p. 143; 385; 401.
- Farlex Partner Medical Dictionary*. (2012). Retrieved November 14 2019 from <https://medical-dictionary.thefreedictionary.com>
- Fauconnier, G., Turner, M. (2003). *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. Basic Books, New York.
- Kondratyev, D., Ryabova, A. (2011). *Medical Latin. Course of Latin Language for foreign students at educational institutions providing higher medical education*. Гродно. ГрГМУ, 185. http://www.grsmu.by/files/file/university/cafedry/inostrannuh-yazukov/files/fiu/lat_med_manual.pdf.
- LaFleur Brooks, D., LaFleur Brooks, M., Levinsky, D. (2019). *Basic Medical Language*. Sixth edition. p. 1
- Lakoff, G., Johnson, M. (1980). *Metaphors We Live By*. The University of Chicago press. Chicago, 25.
- Medical Dictionary for the Dental Professions*. (2012). Retrieved November 14 2019 from <https://medical-dictionary.thefreedictionary.com>
- Medical Dictionary for the Health Professions and Nursing*. (2012). Retrieved November 14 2019 from <https://medical-dictionary.thefreedictionary.com>
- Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, Seventh Edition*. (2003). Retrieved November 14 2019 from <https://medical-dictionary.thefreedictionary.com>
- Mosby's Pocket Dictionary of Medicine, Nursing & Health Professions*. 8th ed. (2019) Elsevier. St.Louis, Missouri: Elsevier. p. 113; 475; 907.
- Sager, J. C. (1990). *Practical Course in Terminology Processing*. Amsterdam/ Philadelphia: John Benjamins Publishing. p. 39 **Retrieved September 17 2019 from** https://books.google.bg/books?id=qq7cSFT27cwC&printsec=frontcover&hl=bg&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- The American Heritage® Medical Dictionary. (2007). Retrieved November 14 2019 from <https://medical-dictionary.thefreedictionary.com>
- Касабов, И. (2019). Университетски речник на Нов български университет// Kasabov (2019) Universitetski rechnik na Nov balgarski universitet. Retrieved October 10 2019 from** <https://nbu-rechnik.nbu.bg/bg/obsht-spisyk-na-ponqtiq/termin>
- Кънчева, П. (2009). *Българската анатомична терминология днес*. София: Арсо// Kancheva, P. *Balgarskata anatomichna terminologija dnes*. Sofia. p. 29.
- Попова, М. (2012) *Теория на терминологията*. В. Търново: ИД Знак// Ророва, М. (2012). *Teoriya na terminologiyata*. V. Turnovo. p. 267; 26.