

ASPECTS OF DEPENDENCY OF LITHUANIAN FOUR-COMPONENT DIFFERENT TERMS AND THEIR LATIN EQUIVALENTS

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Annotation

According to scholars any scientific-technical term must be precise, short and easy to form other terms. But sometimes very long anatomical terms occur. Latin keeping unalterable word forms is suitable for terms. Consequently new spheres of science use Latin to form their terminology. Therefore scholars using a Latin word as a term may be sure that the word will not gain new meanings and will not cause ambiguity of the usage. In scholars' opinion Latin composite terms in medical terminology make a particular part. Their productivity is determined by their suitability economically denote, when the equivalent in the mother-tongue is expressed by periphrases.

Key words: four-component terms, dependency, different terms, anatomical terms.

Introduction

The field of anatomy, one of the most ancient sciences, first evolved in Egypt. From the Early Dynastic Period (3100 BC) until the time of Galen at the end of the 2nd century AD, Egypt was the center of anatomical knowledge, including neuroanatomy. Knowledge of neuroanatomy first became important so that sacred rituals could be performed by ancient Egyptian embalmers during mummification procedures. Later, neuroanatomy became a science to be studied by wise men at the ancient temple of Memphis. As religious conflicts developed, the study of the human body became restricted. Myths started to replace scientific research, squelching further exploration of the human body until Alexander the Great founded the city of Alexandria. This period witnessed a revolution in the study of anatomy and functional anatomy. Herophilus¹ of Chalcedon, Erasistratus² of Chios, Rufus³ of Ephesus, and Galen of Pergamon were prominent physicians who studied at the medical school of Alexandria and contributed greatly to knowledge about the anatomy of the skull base (Dickson, 2001).

In this article, the research problem is unfolded through two problem questions:

1. To review the peculiarities of the four-component Latin and their Lithuanian equivalent anatomical terms?
2. To review the aspects of coincidence and differentiation of Latin and Lithuanian four-component anatomical terms?

The research subject: coincidence and difference of the dependency of four-component Latin and Lithuanian anatomical terms.

Objectives of the research:

- 1) to review the peculiarities of dependency of four-component Latin and Lithuanian anatomical terms;
- 2) to compare the dependency of four-component Latin and Lithuanian anatomical terms;
- 3) to highlight the differences between the dependency of four-component Latin and Lithuanian anatomical terms;
- 4) to highlight the identity of between the dependency of four-component Latin and Lithuanian anatomical terms.

The history of anatomy extends from the earliest examinations of sacrificial victims to the sophisticated analyses of the body performed by modern scientists. It has been characterized, over time, by a continually developing understanding of the functions of organs and structures in the body. Human anatomy was the most prominent of the biological sciences of the 19th and early 20th centuries. In 1543, Andreas Vesalius⁴, a professor of anatomy at the University of

¹ Herophilus (born c. 335 bc, Chalcedon, Bithynia—died c. 280), Alexandrian physician who was an early performer of public dissections on human cadavers; and often called the father of anatomy. Editors of Encyclopedia Britannica. (1768-2010). *Herophilus, Greek Physician*. Encyclopedia Britannica, Inc. Retrieved from <http://www.britannica.com/biography/Herophilus>.

² Erasistratus Of Ceos, (flourished c. 250 bc), Greek anatomist and physician in Alexandria, regarded by some as the founder of physiology. Known especially for his studies of the circulatory and nervous systems, Erasistratus noted the difference between sensory and motor nerves. Editors of Encyclopedia Britannica. (1768-2010). *Erasistratus of Ceos*. Encyclopedia Britannica, Inc. Retrieved from <http://www.britannica.com/biography/Erasistratus-of-Ceos>.

³ The basis of Rufus's medicine can be briefly stated in his own words: "we are not naturally all the same; we differ very greatly from one another". Hence follows the need to discover the individuality of each patient by every possible means. A patient's illness could be deduced simply from its external manifestations, but this should be a mere preliminary, for true therapy consists in fitting the remedy exactly to the patient. Encyclopedia.com. (2008). *Charlars Scriber's Sons. Complete Dictionary of Scientific Biography*. Retrieved from http://www.encyclopedia.com/topic/Rufus_of_Ephesus.aspx.

⁴ Vesalius was a Flemish-born anatomist whose dissections of the human body helped to correct misconceptions dating from ancient times. Andreas Vesalius was born on 31 December 1514 in Brussels, Belgium, then

Padua wrote in the book **De Humani Corporis Fabrica Libri Septem**, in which he urged his colleagues to free themselves from erroneous medical theories about the human body and to restore the study of anatomy to its rightful place in the curriculum. His book marked a decisive step forward in medical education and in empirical science based on direct observation, detailed description, and shared knowledge.

Anatomical nomenclature is the vocabulary of anatomists that is used to describe the structure of the human body. The oldest written sources of Western medicine are the Hippocratic writings from the 5th and 4th centuries B.C., which cover all aspects of medicine at that time and contain numerous medical terms. The national medical languages had much in common since most of the medical terms were derived from medical Latin, but there were systematic differences.

Though one-word terms are often considered to be better and more comfortable for usage, in scientific, technical and other specific areas, in order to name more complicated concepts, compound terms are used. In anatomical nomenclature *Nomina Anatomica* axial names of a human body are one-component. Totalizing all two-word terms of the type, where subordinate components of Lithuanian and English terms are adjectives, and subordinate components of Latin two-word terms are comparatives, it can be stated that differences between Lithuanian, English and Latin binomial terms with comparatives are not casual. K. Gaivenis (1963, 1964, 1965, 1967, 1969, 1973, 1975, 1977, 1982, 1994, 1997, 2002), St. Keinys (1973, 1979, 1992, 1997, 1998, 2001), V. Skujiņa (1979, 1993, 1997, 1999), V. Danilenko (1967, 1977, 1979, 1986), T. Kandelaki (1970, 1977), J. Klimavičius (1975) analyzed the conception of a term, the system of terms, requirements for terms. J. Jablonskis was the first who singled out composite terms as a separate type of terms in 1913 reviewing K. Jaunius „Lietuvių kalbos gramatika“. Terms consisting of some words he called *compound terms* (Gaivenis, 1975, p. 59).

The investigative object consists of 2524 Lithuanian anatomical composite terms and 2506 Latin anatomical composite terms (total 5030 terms). Composite terms have been selected from various resources. A. M. Rassinoux has analyzed 5500 French medical terms and deduced that the majority of these terms are composite (Rassinoux, 1999, pp. 168-182). According to A. M. Rassinoux, P. Ruch and other scholars composite medical terms are varying (Baud, Rassinoux, 1999, pp. 22-26). Foreign scholars discuss clinical terms mostly. English surgical terms have been analyzed by P. Ruch, R. H. Baud, C. Lovis and others. In their view composite and compound terms make the majority. Though one-component terms are considered to be better and more convenient in usage, however in various spheres of science, technique and other special fields of human activities in order to name more complex concepts composite terms are used, which “make the major part of terms” (Zemlevičiūtė, 2002, pp. 336-337). The most frequent composite terms are formed of two or three words. Multiword terms (four-component – eight-component) are rare.

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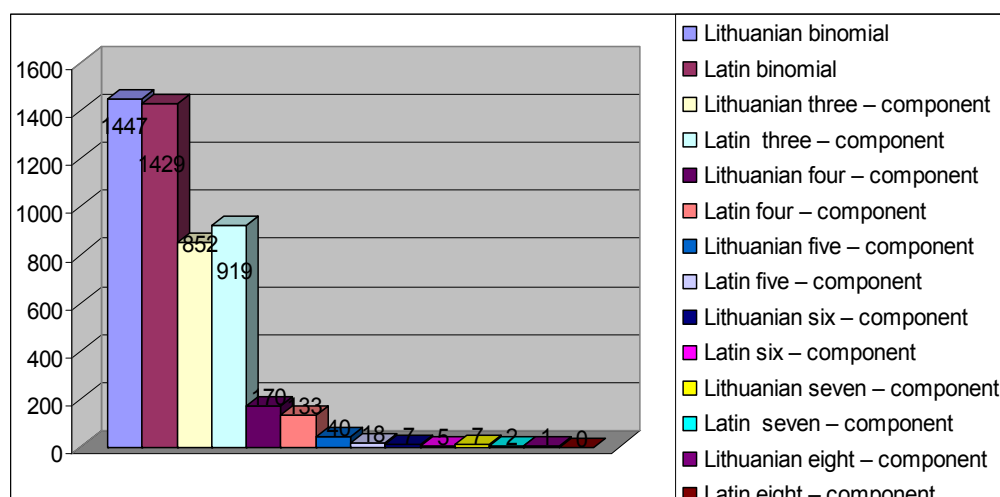


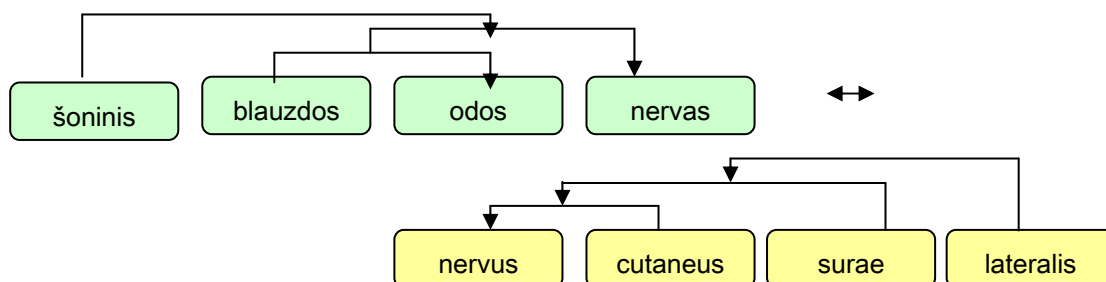
Fig. 1. The structure of Lithuanian and Latin composite terms

part of the Holy Roman Empire. He came from a family of physicians and both his father and grandfather had served the holy Roman emperor. Vesalius studied medicine in Paris but was forced to leave before completing his degree when the Holy Roman Empire declared war on France. He then studied at the University of Louvain, and then moved to Padua to study for his doctorate. Upon completion in 1537 he was immediately offered the chair of surgery and anatomy. (Nephron, Am.J. (1997). *The Flemish Anatomist Andreas Vesalius (1514-1564) and the Kidney*. Department of Nephrology, University of Antwerpen, Belgium).

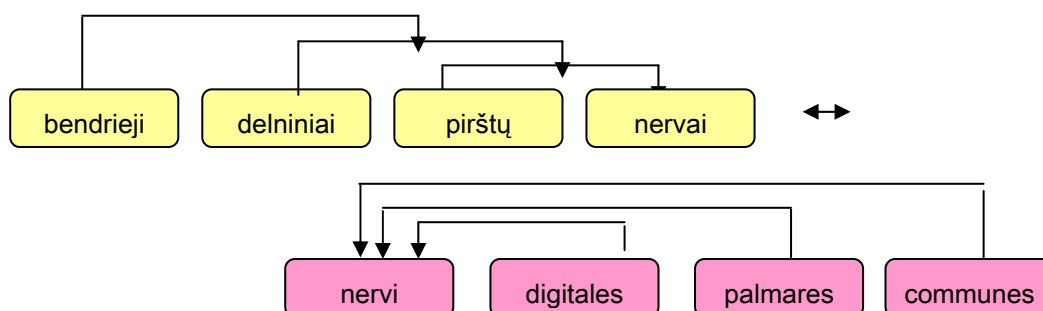
Dependency of Lithuanian four-component different terms

The dependency of components of Lithuanian and Latin four-component terms (*Lithuanian four-component* ↔ *Latin four-component*) can be diagrammed like so and the following structural groups can be distinguished.

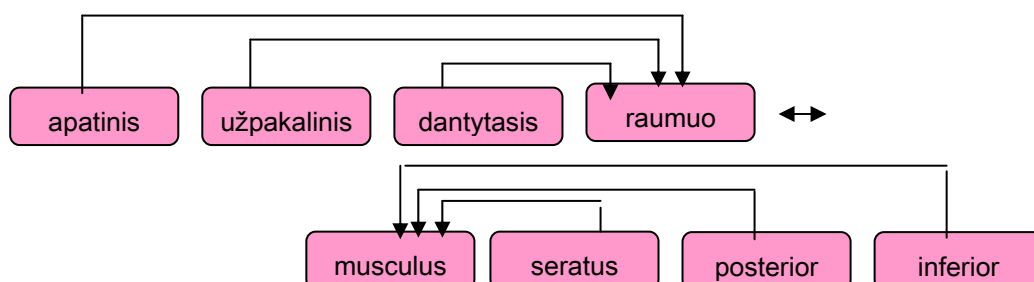
To the first structural group belong composite terms of the first, twenty seventh configurations:



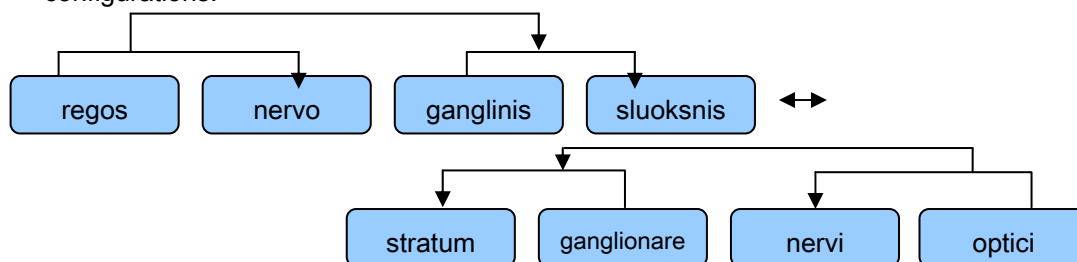
To the second structural group belong composite terms of the second, seventh, eighth, ninth, twelfth, thirteenth configurations:



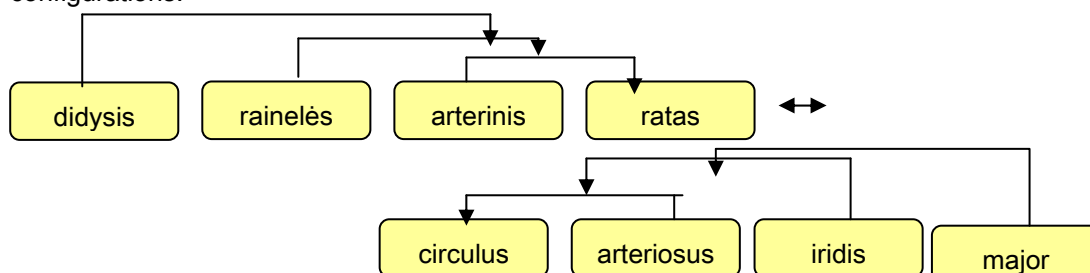
To the third structural group belong composite terms of the third configuration:



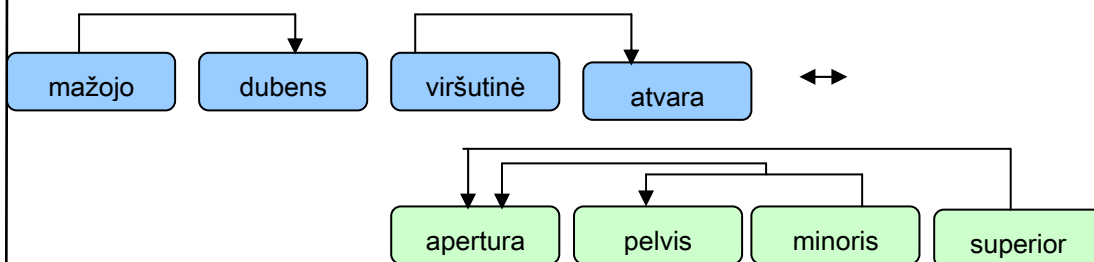
To the fourth structural group belong composite terms of the fourth, twentieth, twenty first configurations:



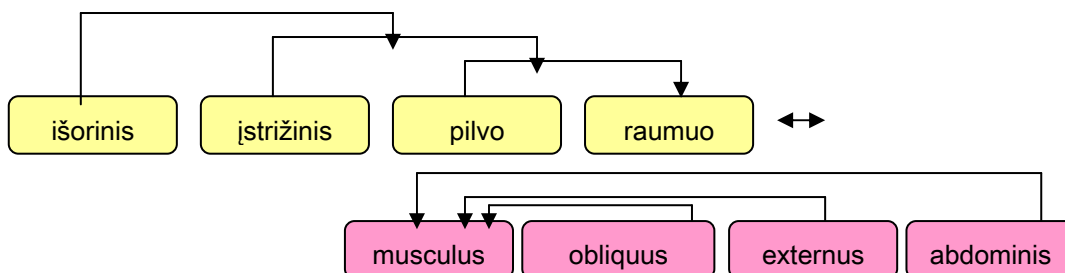
To the fifth structural group belong composite terms of the fifth, fourteenth, fifteenth configurations:



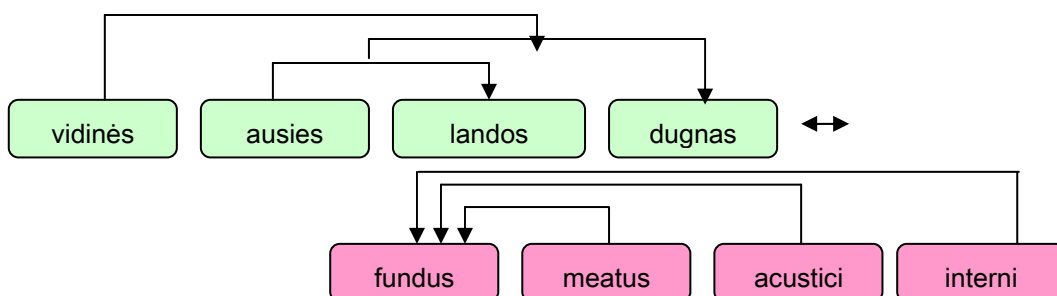
To the sixth structural group belong composite terms of the sixth configuration:



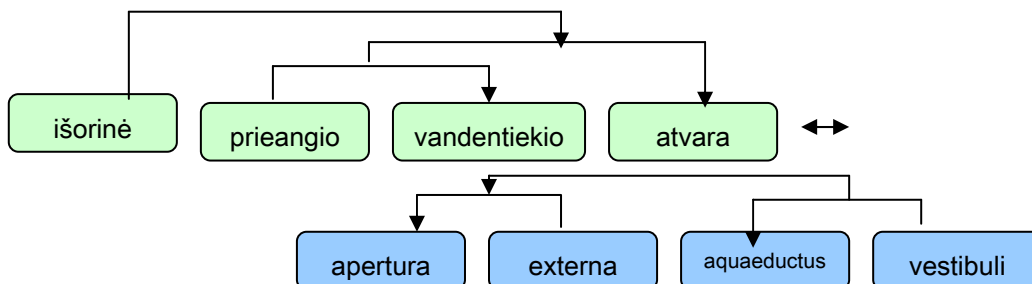
To the seventh structural group belong composite terms of the tenth, eleventh, twenty sixth, twenty eighth, thirtieth, thirty first configurations:



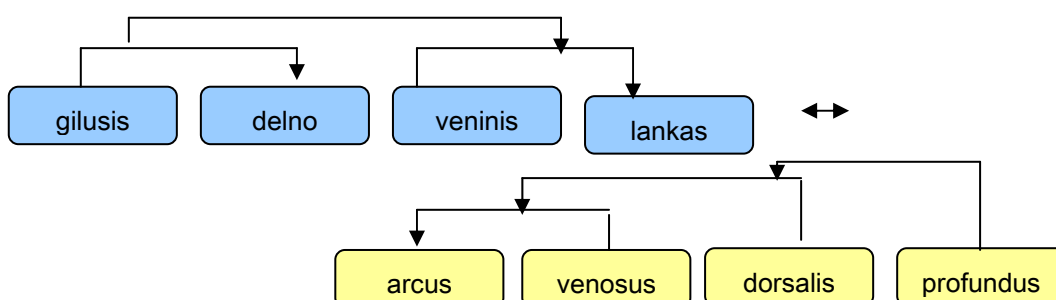
To the eighth structural group belong composite terms of the sixteenth configuration:



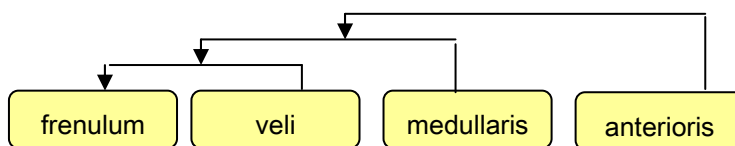
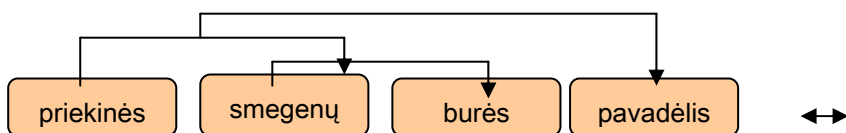
To the ninth structural group belong composite terms of the seventeenth, nineteenth, twenty fifth, twenty ninth, thirty second, thirty third configurations:



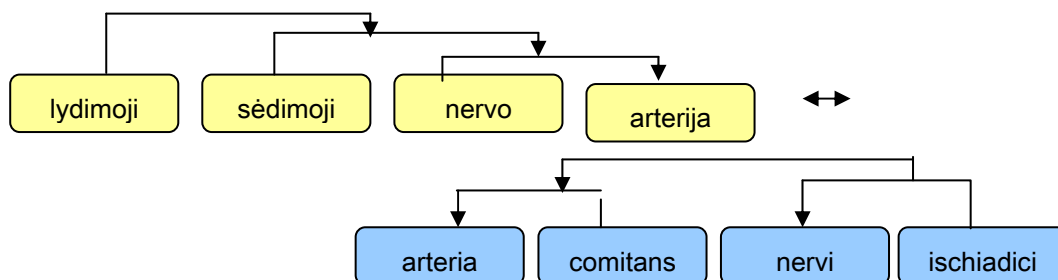
To the tenth structural group belong composite terms of the eighteenth configuration:



To the eleventh structural group belong composite terms of the twenty second, twenty third configurations:

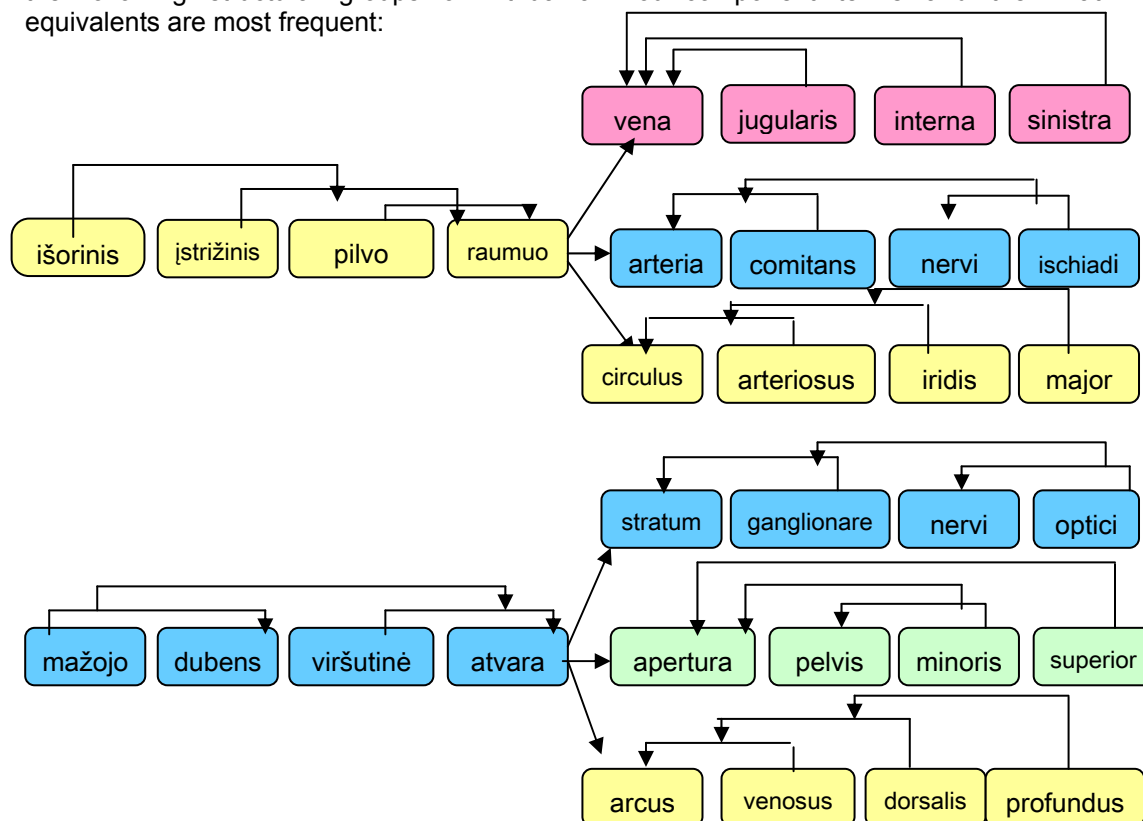


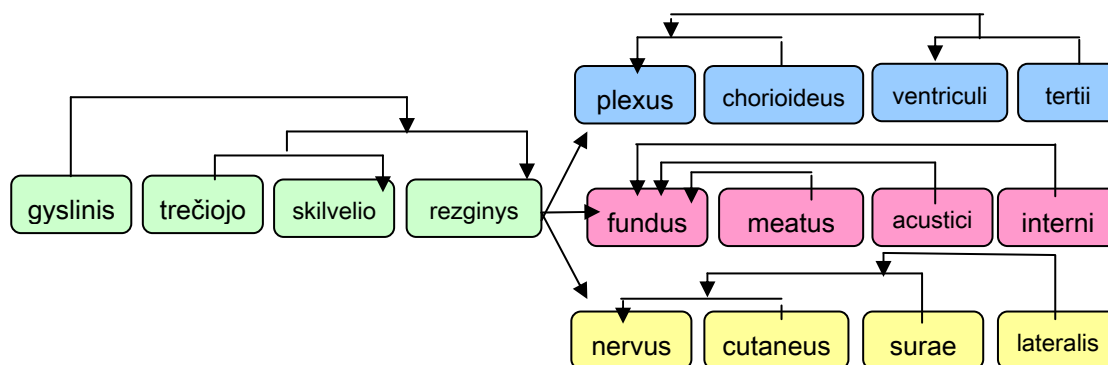
To the twelfth structural group belong composite terms of the twenty fourth configuration:



The schemes of dependency of Lithuanian and Latin four-component show that more frequent are four-component terms, made in the mode of inclusion, when to the collocation of a modifier and an attribute other attributes are subordinated. They make 64.06% of all found Lithuanian four-component terms of the type. Lithuanian four-component terms, made the collocation of the second and first subordinate components denote the basic component, the third subordinate component the whole collocation, make 14.06%. to the second structural group belong composite terms which are made of two connected independent collocations. It is less typical – it makes 9.38% of all found Lithuanian four-component terms. Terms made of a modifier and three independent attributes are not typical of Lithuanian anatomical terminology (only 6.25%).

With reference to the analysis of the discussed structures, it can be summarized, that the following structural groups of Lithuanian four-component terms and their Latin equivalents are most frequent:





From the point of view of structure Latin terms are of four main groups of structure. To first structural group belong collocations made of a modifier and three independent attributes. It makes 53.13% of all the amount of four-component terms. The second structural group is rather typical of Latin four-component terms. 29.69% of all terms belong to it. Terms of this group, made in the mode of inclusion, when to the collocation of a modifier and an attribute other attributes are subordinated. The third structural group is frequent on the average – 14.06% of four-component terms belong to it. To this group belong composite terms, made of two connected independent collocations. The fourth structural group is not typical of Latin four-component terms, only 3.12% of Latin composite terms belong to it. Terms of this structural group the collocation of the second and first subordinate components denote the basic component, the third subordinate component the whole collocation.

There is no recognized discipline called medical linguistics, but perhaps there ought to be one. The language of medicine offers intriguing challenges both to medical historians and to linguists. Classical scholars have analysed the contents and language of the most ancient medical records in great detail, but the later development of medical terminology has received much less attention.

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Received: 8 June 2016

Accepted: 11 October 2017