

ROLE OF THE LATIN LANGUAGE IN MEDICAL TERMINOLOGY

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Abstract: *Latin is the basis of medical terminology, one of the important components of modern medical science and science in general. Most terms used in biology and medicine are derived from classical languages, Latin and Greek. Before Latin was listed as a subject offered in the syllabus of medical studies. Now a basic understanding of Latin and Greek etymology increases the productivity of learning and comfort while using medical terminology. A knowledge of the meaning of the roots, prefixes, and suffixes enables the student to thoroughly analyse a given medical term in terms of its component parts. This is probably the greatest aid in learning to understand the vocabulary of medicine. The main part of this study consists of tables containing the most common morphemes together with numerous examples.*

Key words: *Latin, Greek, language of medicine, medical terminology*
LATIN is traditionally learned by the future doctors, pharmacists and representatives of other specialties.

All of them know well the Latin proverb «In via est in medicina via sine lingua Latina» – «The way to medicine is impossible without Latin language». Medicine of Europe as an independent science began in Greece. Medical terms often come from Greek and Latin because these languages were the foundation of Western scientific and medical knowledge for many centuries. During the Renaissance, when there was a renewed interest in classical learning, many new scientific and medical terms were coined based on Greek and Latin roots. The medical profession, much like the legal profession, uses a number of Latin phrases to indicate specific conditions or instructions, and their training requires a familiarity with those phrases. Over the centuries, the development of medical terminology has been based on the process of creating parallel national and international terms, known all over the world and well-defined. In the field of medical, biological and pharmaceutical sciences, such a reliable tool of communication was Latin and Greek. In recent years, gradually but consistently Latin has been replaced by the Polish language, which is becoming evident in the diagnoses of diseases. Simultaneously, another trend also prevails. In fact, English has already permeated and partially replaced even Polish medical language. This state of affairs is somewhat surprising,



since basic knowledge of Latin names of diseases and drugs enables international communication, which seems crucial at a time when more and more people enjoy travelling abroad. Medical Latin still enables, or at least facilitates, the use of multilingual specialist literature. It is indispensable in communication with scientists from other countries. It enables us to precisely define and differentiate between concepts¹. The benefits flowing from knowledge of Latin are so significant that it seems impossible to imagine a physician, pharmacist or physiotherapist without even elementary knowledge of this language. Nonetheless, fluent command of the vocabulary requires a lot of effort. Learning numerous names and terms without philological preparation is time-consuming; moreover, it usually leads to establishing a mechanical bond between specific terms and a set of letters or syllables. This method of acquiring language competence is not sufficient or satisfactory, because vocabulary acquired in such a way is easily forgotten. It is even easier to twist the terms. The aim of the present paper is to offer a remedy for the difficulties mentioned before, or at least, to familiarise the reader with medical vocabulary. Terminology, which is gathered in transparent tables is intended to unveil the structure of the Latin terms as well as to trace shades of the contents suggested by prefixes and suffixes. Understanding of the etymological and morphological mechanisms is a simple way to acquire and remember the most curious phrases. It is worth mentioning that, admittedly, juxtapositions similar to those offered in my paper have appeared previously. However, it seems advisable to present them once again in a more sophisticated form, especially at a time when educational standards for the medical faculty do not include teaching Latin. Today, the dominant language of science is English. All the most influential medical journals are written in English, and English has become the language of international conferences. We have entered the era of medical English, which resembles the era of medical Latin in that, once again, physicians have chosen a single language for international communication. Note, however, that English is rooted in the classical languages. It is estimated that about 90% of the medical vocabulary in English is of Greek or Latin origin. One cannot deny the huge impact of ancient Greek on medical terminology. It may be concluded that the modern language of medicine basically represents the ancient Greek language transcribed into Latin. English equivalents gathered in the tables and sounding almost identical to the original term show that removing Latin from the curriculum was not the right decision. Even poor knowledge of a foreign language (English or a Romance language, and even a Germanic language) is enough to read a diagnosis written abroad, on the



understanding that the reader has at least a basic knowledge of Latin. Its founder was the greatest physician of ancient times Hippocrates (460–370 B.C.), so the whole system of medicinal terms was Greek too. It was further developed in the works of the Alexandrian school in Egypt, which made a number of important discoveries in the structure of the human body. These are the works of Herophilus (the last third of the IV (fourth) century B.C.), who is considered to be the father of the descriptive anatomy, and Erasistrates (300–240 B.C.), who described cardiac and venous valves, intestinal peristalsis. Originally it was the native language of a small tribe Latini living in the central part of Apennines in the region called Latium. The capital was Rome founded in 753 B.C. In course of the time Latin became the state language of the great Roman Empire included till V A.B. all countries of Mediterranean basin, including territories of modern Italy, Spain, France, Greece and also a part of Britain, Germany, Hungary, Romania, Moldova and other countries. Latin alphabet is now used in all European countries. Inscriptions are the first monuments of the Latin language. The oldest Latin inscriptions written in existence date from the VI century B.C., but inscriptions written earlier than about 200 B.C. are few and short. The earliest extant Latin literature is the comedies by Plautus (254-184 B.C.) and comedies by Terence (190-159 B.C.). The Latin language of the classical time is presented by the remarkable works created in Rome during I century B.C. – at the beginning of I century A.D. One studies the classical Latin in higher educational establishments of humanities. The period of the I–II centuries A.D. is called postclassical. The so-called Late Latin (III-IV centuries A.D.) is the last period of the Latin language. At the time of the late Empire, its downfall (476 A.D.) and the emergence of barbarian states the difference between the written Latin language, its literary and popular colloquial forms becomes wider. During this period, Christianity spreads in the region and the Christian literature appears. In the works by Hieronymus (340-420) and Augustine (345-430) and other late Latin authors we find a lot of morphologic and syntactic forms preparing the transition to the young Roman languages, which got this name from the main city of Romans: Rome – Roma, among them are such modern languages as Italian, Spanish, Portuguese, French, Romanian, Moldavian and others. The Latin language of the Middle Ages mainly remains the language of science. Teaching was conducted in Latin not only in primary schools, but also at Universities, which had appeared at that time in Europe. Latin was used in contemporary literature, jurisprudence, diplomacy, Catholic Church service as well. The outstanding scientists, philosophers, physicians of the European countries



wrote and published their works in Latin during the movement of Renaissance in the XIV– XVI centuries. Tradition to write scientific works and 7 treatises in Latin remained until the second part of the XIX century. At present, Latin is called a dead language, as it is no longer the means of communication, it exists in modern Roman languages, and it is widely used in terminology of all sciences and humanities.

Medicine of Europe as an independent science began in Greece. Its founder was the greatest physician of ancient times Hippocrates (460–370 B.C.), so the whole system of medicinal terms was Greek too. It was further developed in the works of the Alexandrian school in Egypt, which made a number of important discoveries in the structure of the human body. These are the works of Herophilus (the last third of the IV (fourth) century B.C.), who is considered to be the father of the descriptive anatomy, and Erasistrates (300–240 B.C.), who described cardiac and venous valves, intestinal peristalsis. Doctor Aulus Cornelius Celsus (the end of the I (first) century B.C. – the first part of the I century A.D.), a Roman scientist, a person of encyclopedic knowledge, the author of the work «On Medicine» made a great contribution to the medicinal terminology. He introduced into the Roman medicine new Latin names of diseases. The most interesting fact was that he also used many traditional Greek terms in combination with their Latin equivalents. Later this duplication became a remarkable feature of the medical terminology. Practicing physicians were mostly of the Greek origin that is why Greek borrowings took root in Latin very quickly. One of such doctors, Rufus Ephessian (I-II centuries A.D.), wrote in Greek a short manual for students «On Naming Parts of the Human Body». Another author Dioscorides Kilikian (the second part of I century A.D.), being a physician in Rome, wrote the work «On Medical Substances», in which he described nearly 400 medicinal plants. It served a kind of a textbook on pharmacology for the whole Middle Ages. Claudius Galen (129, 130, or 131–200 A.D.) was an outstanding doctor, anatomist, pharmacologist, and philosopher of Antiquity. Nowadays his name is associated with so-called the «Galen’s Preparations». He compiled a dictionary and commentary to the works of Hippocrates and he was the author of such new terms as thalamos, phlebs azygos, etc. One of the best medical schools of the Middle Ages – the Salernian, the first school in the West Europe, began to work in the IX century. It left a number of dietary and hygienic directions, which remain actually in our days. Arabic scientists made a great contribution to the development of medicine in the Middle Ages mainly the remarkable physician of the East Ibn Sina 8 (Avicenna) (980–1037). His basic work «Canon of Medical Science» was



translated into Latin in the XVIII century and was well known in the West. The new rise and development of medicine is connected with the epoch of Renaissance. In 1478 in Florence, the work by Cornelius Celsus «Of Medicine» was published for the first time. The great Italian painter and scientist Leonardo de Vinci (1452–1519) studied the structure of the human body very attentively and left more than 200 anatomical drawings (sketches). Andreas Vesalius (1514–1564), the great reformer of anatomy and medical terminology, lived in the first part of the XVI century. He is the author of the capital work «On the Structure of the Human Body» written in Latin and published in 1543. He taught anatomy in Latin too. Our modern anatomical terminology is inherited from the works of Vesalius, who used for the first time such Latin names as atlas, scapula etc. In the works of his pupil Fallopius one can find such terms as tuba uterina, labyrinthus, placenta, etc., which are included in the International Anatomical Nomenclature – Nomina Anatomica. Such scientists, philosophers, physicians and doctors of European countries as Bartholomew Eustachius (1510–1574), Rene Descartes (1596–1650), Thomas More (1478–1535), Newton (1643–1727), Copernicus (1473–1543) and in the XVIII century botanist Charles Linney (1707–1778) and others wrote their works in Latin. The contribution of Renaissance anatomists to the anatomical dictionary is great: about 700 names were inherited from the Greeks by the end of the XVIII century, the number of terms grew up to 30 000. Progressive ideas of Vesalius came to Russia as early as the middle of the XVIII century. Epiphany Slavintsev translated into the Slavonic language the short variant of anatomic works of Vesalius. The first Russian anatomical Atlas was published in 1774. Among the Russian scientists and physicians of the XVIII–XIX centuries, who wrote in Latin, were M.V. Lomonosov (1711–1765), botanist N.M. Maksimovich-Ambodich (1744–1812), microscopist-histologist A.M. Schummlansky (1748–1795), his brother-clinician P.M. Schummlansky, the Great Russian surgeon N.I. Pirogov (1810–1881) and many others. Nowadays the Latin and Greek languages serve the basis for creation of new medical terms, because the roots of the words are not associated with conversational practice and have definite special meaning and these roots are practically internationally known. THE TERM Any specialist must correctly understand and use the appropriate special vocabulary or terminology for successful work in any field of science, technique, and industry. The main function of the term, in Latin «terminus» – limit, boundary is to express exactly the appropriate scientific concept. The term may be expressed by one word (e.g. appendicitis, bone, chest, etc.) and by a word combination (e.g. arch of vertebra,



transverse process, vertebral column, etc.). The term expresses the scientific and scientific-technical concept. The scientific concept is a result of scientific theoretical generalization and reflects a fragment of the scientific system of knowledge. Unlike ordinary concept, scientific concept has definition (or in Latin «definitio»). Some important signs of scientific concept are revealed in definition. In special (terminological) encyclopedic dictionaries, terms have definitions (e.g. «pneumonia» is the process of inflammation in the tissues of the lungs that comes as independent disease or as complication of illness). A specialist knows the main points of the scientific determination and may judge about it by definition, although both a specialist and not a specialist may use the same words and the same word combinations of the literary language (e.g. pneumonia, tuberculosis, sclerosis, etc.). To know the main points of a scientific definition is to be able to use the given term in combination with other terms, and classify it in the system of definitions (terms) of this science. In the definition associations and place in the system of definitions is revealed in some aspects only. Terminology of a definite field of science is a system of names, words and word combinations, which are used for expression of the scientific concept in the system of concepts, which are in a certain relation with each other. In contrast to other layers of dictionary, terminology is the subject of systematic regulation. Terminology is in constant change: some words are changed, died; others are added and become unused. Many well-known special words get the new scientific meaning. Terminology is a considerable organic part of language in the science and scientific literature.

RECOMMENDED SOURCES OF INFORMATION:

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