СЕРИЯ ИСТОРИЯ И ФИЛОЛОГИЯ

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VOCABULARY OF DENTAL NOSOLOGY FROM ETYMOLOGIC POINT OF VIEW

Dental terminology is a part of general medical terminology that contributes to the functioning of the conceptual apparatus of dentistry as a science. This research is concerned with the historical and philological understanding of dental terms in the English language. The purpose of the research is to identify the features of the etymology of the English vocabulary associated with a dentist's professional activity and denoting the names of dental diseases. It is shown that most lexical units are formed by means of Greek and Latin term elements, and Greek and Latin vocabulary became the basis for English dental terminology. Dental vocabulary was developing and transforming along with the new trends in medicine and the emergence of special knowledge. Examples of eponym terms (in particular, anthroponyms containing the names of scientists) denoting the names of various dental diseases are presented. The knowledge of etymology expands the professional linguistic picture of the world in English dental terminology. The research contributes to the systematization of nosological terms of dentistry.

Keywords: etymology of dental vocabulary, terminology, dental disease.

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The relevance of this research is determined by the growing interest of modern linguistics in the study of terminological systems of various fields. Nowadays, great attention is paid to the etymology of medical vocabulary. There is a need in the research of etymology of the terminology of dentistry. It has not been sufficiently studied, unlike the etymology of general medical vocabulary.

In order to have objective data to represent the modern scientific language of dentistry, an etymological analysis of the terminological vocabulary and historical review of the creation and development of the terms of dentistry as a science are necessary. It is known that a term is a special word or a word combination (collocation) that differs from other nominative units by unambiguity, exactness, systematic character and independence of the context [34, p. 14].

The object of the study is the English dental terms selected by the method of viewing specialized literature, monographs, textbooks, scientific articles in English.

The aim of this research is to review the etymology of the terms meaning the names of the dental diseases. The method of lexicographic analysis (in particular, the analysis of definitions) was used in the research.

We have analyzed the names of the most common diseases in dental practice.

Dental caries is one of the oldest and most common diseases found in humans. It is recognized as the primary cause of oral pain and tooth loss [17, p. 2]. The word *caries* is a Latin loanword and means "rottenness, decay, corruption". The Latin word comes from Proto-Italic *kas, usually said to be from Proto-Indo-European root *kere- "to injure, break apart". According to the other etymologies, it comes from Greek ker – "death, destruction" [6] or from Proto-Italic *kazēō – to lack [8]. According to Merriam – Webster dictionary, the first known use of the word *caries* dates back to approximately 1634 [7].

One of the first to use the term *caries* was Pierre Fauchard (1678–1761), a French physician, known as the father of modern dentistry. In 1700s, French dentists Bondette and Jourdain called caries *a dental gangrene* that was caused by tissue inflammation and death of the bone around the tooth neck. John Hunter (1728 – 1793), the author of the book *A Practical Treatise on the Diseases of the Teeth: Intended as a Supplement to the Natural History of those Parts*, expressed dissatisfaction with the term *caries* and preferred the term *mortification*. In 1806, a British dentist Joseph Fox was among the first of his contemporaries to use the term *dental caries*. Thomas Bell, the author of the book *Anatomy, Physiology, and Diseases of the Teeth* that was published in London in 1831, preferred the term *dental gangrene* to *decay* or *caries* [28, p. 2].

The synonym to *caries* is *tooth decay*. The term was initially used to describe holes in the teeth [9]. The terms *dental caries* and *cavities* are often used interchangeably, but they're not entirely the same. *Caries* is a medical term that refers to tooth decay. The term *cavity* refers to the presence of caries/tooth decay [10].

Types of dental caries include: enamel caries, acute caries, secondary caries, arrested caries, and early childhood caries. Early childhood caries is also denoted by the terms *bottle mouth caries* or *baby bottle syndrome*, as it is promoted by the sugars, acids, and sometimes *Streptococcus mutans* in a bottle of milk or juice left in contact with a child's primary teeth [5]. There are a number of names for this type of caries including

nursing bottle caries, nursing bottle syndrome, milk bottle syndrome, baby bottle caries, and baby bottle tooth decay. The term baby bottle tooth decay is easily understood by nonprofessionals and therefore is used in the programs that educate parents about this condition in the children [27, p. 268].

The term *caries* is used not only in dentistry. *Spinal caries* means "tuberculotic osteitis of the vertebrae and of the intervertebral cartilages" [29]. We can find the word *caries* in this meaning in the poem *The Haughty Actor* by the English dramatist, librettist, poet, and illustrator William Schwenck Gilbert. The character of the poem, surgeon Cobb, says to his patient, the actor:

When in your hip there lurks disease

Or devastating CARIES

In HUMERUS or FEMUR,

If you can pay a handsome fee,

Oh, then you may remember me –

With joy elate I'll amputate

Your HUMERUS or FEMUR [33].

The word *pulpitis* means "inflammation of the pulp of a tooth" [26]. According to Merriam – Webster dictionary, pulp is the soft sensitive tissue that fills the central cavity of a tooth [25]. The noun *pulp* meaning "fleshy part of a fruit or plant" was spelled *pulpe* in Middle English. It comes from Latin *pulpa* "animal or plant pulp; pith of wood". Perhaps the Latin word comes from the same root as *pulvis* - "dust" [24]. The Latin suffix *-itis* is a word-forming element denoting "diseases characterized by inflammation" (of the specified part). It comes from Greek *-itis*, feminine of adjectival suffix *-ites* - "pertaining to" [16].

Strange as it may seem, there are no information about

Gingivitis is a term of Greek and Latin origin used to denote a very common inflammatory condition of the gums. It comes from the Latin gingivae – 'the gums' and the Greek suffix –itis denoting inflammation. The Latin word gingiva comes from Proto-Indo-European *gyewh₁- [11]. This word reminds of an English word chew. It is unclear who first discovered gingivitis, but many think it was found and became a true disease in the late 19th century [20]. According to Merriam – Webster dictionary, this term was first used in 1860 [12].

A certain type of gingivitis is named *Vincent gingivitis*, sometimes referred to as *Vincent infection*, *Vincent stomatitis*, acute necrotizing ulcerative gingivitis (ANUG), Vincent angina, or trench mouth. It is caused by the symbiotic microorganisms *Bacillus fusiformis* and *Borrelia vincentii* [35]. The term trench mouth was coined in World War I when ANUG was common among trench-bound soldiers who suffered extreme conditions with limited medical care [30].

Periodontitis is a chronic inflammatory disease of the gums that is triggered by bacterial microorganisms [36]. According to Online Etymology Dictionary, the word *periodontitis* was first used in the English language in 1842. It comes from the adjective *periodontal* and the suffix *-itis* [22]. In its turn, *periodontal* means "surrounding a tooth, pertaining to the lining membrane of the socket of a tooth". *Peri-* is a word-forming element of Greek origin meaning "around, about, enclosing". It is cognate with Sanskrit *pari* — "around, about, through", and Latin *per*, from Proto-Indo-European root *per- "forward". The Greek *odon* (genitive *odontos*) comes from Proto-Indo-European root *dent — "tooth" [21]. The Old English word toð/tōth (plural — teð) comes from the Proto-Germanic *tanthu-, which also originates from the same proto-Indo-European root [32].

Periostitis is a complication of periodontal diseases of the teeth. In literal translation it is "inflammation of the periosteum (connective tissue covering the jaw)" [23]. Periostitis is also known as *gumboil*. The first known use of gumboil in the meaning of "an abscess in the gum" was in 1753 [13]. Dental periostitis is also named *parulis*, from the Greek *para* – beside, near, alongside, and *oulon* – gum [19].

Fluorosis is an enamel hypoplasia caused by the ingestion of excess fluoride during the time of enamel formation [18, p. 262]. The one-word term *fluorosis* includes two Greek term elements *Fluorum* (fluorine) and -ōsis (chronic disease). In the United States of America, in the beginning of the 20th century there was a local term for fluorosis – *the Colorado brown stain*. A dentist, Frederick McKay, set up practice in Colorado Springs in 1901 and discovered a high proportion of the residents had stained teeth. He took this information to Greene Vardiman Black, a prominent American dentist of the time [31, p. 97].

The names of some diseases are eponymous terms. In this article, only those that are based on anthroponyms, i.e. personal names and surnames, are considered as eponym terms. In the language of science, this method of nomination is quite natural and does not cause difficulties in professional communication. These terms are formed according to "the noun + noun" model: *Hutchinson's teeth*, *Fournier's teeth*, *Hunter glossitis*, *Turner's tooth*, and *Pfluger teeth*.

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Hutchinson's teeth are tooth abnormality seen in congenital syphilis [14]. The disease is named for Sir Jonathan Hutchinson (1828–1913, a British surgeon, ophthalmologist, dermatologist, venereologist, and pathologist, who first described it and discovered its connection with congenital syphilis in 1858.

Fournier's teeth are similar to Hutchinson's teeth, but the incisors do not have an anomaly of the cutting edge [3]. The condition is named after Jean Alfred Fournier (1832 – 1914), a French dermatologist.

Hunter glossitis or Moeller-Hunter glossitis is a diffuse and clinically non-specific atrophy of the lingual papillae. It is named after the German surgeon Julius Otto Ludwig Moeller (1819–1887) who described the condition in 1851 and the Scottish physician William Hunter (1861–1937) who described the condition in 1900 [15, p. 1]. This disease is also termed as *bald tongue* or *smooth tongue*.

Turner's tooth is a presentation of enamel hypoplasia that normally affects only a single tooth [4, p. 215]. The Turner's tooth is named after the first person to describe it, the English dentist Joseph G. Turner (1912).

Pfluger teeth are underdeveloped teeth, the size of the neck of which is larger than the size of the gums [1, p. 116]. Pfluger teeth are named after the German physiologist E.F.W. Pfluger (1829–1910).

Eponymic terms include not only the definition of a concept, but also the knowledge about the scientists who described these concepts, or theories, methods, technologies, etc. Moreover, the eponymic term shows the anthropocentricity of medical science, and reflects a professional linguistic picture of the world focused on a person [2, p. 104].

Etymological analysis of various modern English dental terms allows us to say with confidence that most dental terms are of Indo-European origin, consisting of Greek and Latin. Therefore, Latin and Latinized Greek vocabulary became the basis of English dental terminology. The vocabulary of dental terms is constantly updated and develops against the background of social and cultural features of the certain epoch. Dental vocabulary reflects the result of the cognitive process in this area of knowledge and would be the object of further research.

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СТОМАТОЛОГИЧЕСКАЯ НОЗОЛОГИЧЕСКАЯ ЛЕКСИКА С ТОЧКИ ЗРЕНИЯ ЭТИМОЛОГИИ

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Стоматологическая терминология является частью общемедицинской, способствующей функционированию понятийного аппарата стоматологии как науки. Данное исследование посвящено историко-филологическому осмыслению стоматологических терминов в английском языке. Его цель — выявление особенностей этимологии англоязычной лексики, связанной с профессиональной деятельностью стоматолога и обозначающей названия болезней зубов. Показано, что большинство лексических единиц образовано с помощью греческих и латинских терминоэлементов, а греческая и латинская лексика стала основой для английской стоматологической терминологии. Стоматологическая лексика развивалась и трансформировалась вместе с новыми направлениями в медицине и появлением специальных знаний. Представлены примеры терминов-эпонимов (в частности, антропонимов, имеющих в своём составе имена учёных), обозначающих названия различных болезней зубов. Знание этимологии расширяет профессиональную языковую картину мира в английской стоматологической терминологии. Проведённое исследование способствует систематизации нозологических терминов стоматологии.

Ключевые слова: этимология стоматологической лексики, терминология, стоматологическое заболевание.

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