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Translatology/Theory and Practice Department**

**Translation Problems of Medical Terms (on materials of  
texts in the sphere of stomatology)**

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# INTRODUCTION

Languages are different from each other, they are different in form having distinct codes and rules regulating the construction of grammatical structures of a language and these forms have different meanings. Language is a formal structure, a code which consists of elements and can combine to signal semantic “sense” and, at the same time, a communication system which uses the forms of the code to refer to entities (in the world of sense and in the world of mind) and create signals which possess communicative “value”.

Every nation has its language and it is a tool of communication within the people. Through the language, people could communicate and share the ideas in different spheres. As the mission of translator is to put an inter lingual communication. Through the communication, a country puts a good cooperation in different fields with other countries of the world

The presidential decree under number 18/75 underlines the fact that basic knowledge of English taught in educational establishments must be renovated, and it makes us find out methods of teaching suitable for the teaching at schools, lyceums and Universities mentioning the level of students. Learning foreign languages in Uzbekistan has become very important since the first days of the Independence of our country. Much attention is paid to the rising of education level of people, their intellectual growth. The President of Uzbekistan I. A. Karimov said: **“Today it’s difficult to revalue the importance of knowing foreign languages for our country, as our people see their great prosperous future in the cooperation with foreign partners.”** That’s why knowing foreign languages has become very important today. Under the notion “knowledge” we understand not only practical but theoretical basis too. Scientists of the Republic carry out fundamental and applied research in many areas of modern science. The Republic has world-class research schools and investigations in many areas. Development of our own intellectual, scientific, and

technical potential, as a factor for sustainable progress of our country, we immediately associate with further expansion of scientific, technological and cultural links with prestigious research centers in the world, with the joint research on many important issues. As our President said to our future generation that “The task of science is to form our future, trends for tomorrow, the laws of nature, to show the way it will be. Science must be the means and the force driving forward the development of society”. According to research, a number of indicators of the education system of Uzbekistan exceed many countries. In particular, the analytical data show that the indicators of Uzbekistan concerning the development of the education sector of the country, government spending on it, the cost of capital construction and renovation of schools, number of teachers as a percentage of the number of students, number of graduates in the sciences and engineering, the average assessment of students in GMAT (standardized test for determining the ability to successfully study in business schools) and others, are very high. The study provides in details the basic criteria and factors of the achievements of Uzbekistan in the field. There is emphasized that the strongest sides of social and economic development and innovation potential of Uzbekistan are the investment into human capital, research, the amount of public expenditure on education and the overall status of the education system. In this connection it’s appropriate to remind the saying of the President Islam Karimov: “It’s not a secret that XXI century – is the one, where the intellectual values dominate. That is exactly why, if each state and society does not realize this truth and the need to master new knowledge, increasing intellectual potential, if these criteria do not become the purpose of their everyday life, then this society will leave out of world progress framework”. It should be underlined, that our people, which in the recent past was really behind of universal development, made right conclusions from this bitter experience, and after identifying the aspiration to science and education, intellectual development, growing harmoniously developed youth which is second to none, achieved significant

practical results in this direction. Thanks to that Uzbekistan today moves to front lines of world development. This is brightly confirmed by the results of this rating.

Thus, our qualification paper is dedicated to the study English, Russian and Uzbek terminology of medical terms (on materials of texts in the sphere of stomatology) and their translation peculiarities.

Meanwhile, such researchers study object of applied nature, directly connected with translation and methods of mastering of the second language, the elaboration of which includes primary tasks modern linguistics face in the term of continuously developing international contacts. The above mentioned defines **the topicality** of this problem.

**The aim** of the given qualification paper is to analyze terms related to stomatology and terms their lexica-semantic features corresponding to the English, Russian and Uzbek languages.

**The tasks** of the research are as followings:

- 1) to give general background of stomatology terms
- 2) to analyze the terminology in the World of Medicine
- 3) find out all stomatology terms
- 4) to put them in a system by analyzing them
- 5) to give their correspondences in Russian and Uzbek languages.

**The object** of the qualification paper contains the terminology in stomatology, and it is dedicated to the study of the problems of medical terminology in its system.

**The subject** of the research is the terms related to stomatology and to analyze linguistic materials which bear clothing feature according to the theory and practice of translation.

**Research methods.** The main research method is comparative typological method, descriptive method of language on the basis of typological categories, and based on the samples of component analysis method of modeling.

**Scientific novelty** is determined by the necessity of detailed and comprehensive analysis of the term is related to the stomatology, which have never been studied before, analyzing the stomatology terms and giving their equivalents in Russian and Uzbek.

**The theoretical value** of the qualification paper is described by making a certain contribution to the resolution of the question of translation of stomatology terms in different languages as well as the development of common topics of terminology in theory of translation.

**The practical value** of this work is in the fact that methods and results of research may be used in studying process when elaborating lecture courses and when conducting practical classes on lexicology, translation, comparative typology, as well as they may be considered in lexicographic practice when composing dictionaries.

**Material** of the research. Scientific books, textbooks, dissertations, thesaurus and two-language dictionaries, encyclopedias, lexicographic manuals as well as web sites from the global internet are considered as the material of this qualification paper.

**Structure of** the qualification paper. There are two chapters in our qualification paper, each of them consisting two and three paragraphs. And summery of each chapter, final conclusion and list of used literature. At the end, the same work provides with the glossary of stomatology terms and explanation of stomatology terms in English, Russian and Uzbek languages.

**Actually**, the first chapter deals with the theoretical issues whereas general information about medical terms. So, the second chapter is stresses on the development of stomatology and translation analysis of the Stomatology Terms.

## **Chapter I. Scientists' approach to the studies of medical terminology.**

### **1.1 The terms and terminology. The ways of translation medical terminology**

In the Medical sphere there are a lot of doctors, scents, professors are created new methods how to treating for illnesses.

Anne Guignon, RDH, MPH, and Brian Nový, DDS, they are worked together how to dry mouth syndrome and dental professionals' role in diagnosing and managing this condition. They give the version treating and emerging role of arginine-based technologies in the management of dry mouth syndrome.

Ben Miraglia, DDS, he presents novels a case that required a multidisciplinary approach to care for an optimal outcome.

Allen Ali Nasseh, DDS, MMSc, and Dennis Brave, DDS, they cooked – up an instrumentation technique that combines the use of minimally tapered rotary files with an innovative universal finishing instrument that adapts to the natural root canal anatomy.

Paresh B. Patel, DDS, explains how to easily and predictably restore the edentulous arch with either implant-supported fixed zirconia bridges or an implant-retained overdenture.

George E. Kirtley, DDS, addresses the treatment of arch length redundancy or spacing resulting in a diastema between the anterior teeth.

David A. Beach, DMD, MS, focuses on identifying factors that can complicate treatment.

Allan S. Deutsch, describes the effects of the handpiece motion on the properties of the endodontic instruments during root canal procedures.

Howard Glazer, DDS, shares his thoughts on new products and technologies that can make a difference for the clinician and team.

Terminology is a science whose aim is to study terms, which are lexical elements used in specialized fields (subjects or their branches) and generated in such fields or modified from elements already existing in other fields.

Terminology allows the compilation, description and presentation of terms<sup>1</sup>.

- Compilation of terms: preparation of lists with terms belonging to a certain subject, according to a previously established methodology.
- Description of terms: definition or definitions of each term (semantic focus) and description of the elements composing the term and its generation process (morphological focus).
- Presentation of terms: preparation of dictionaries.

Terminology has some aspects in common with Lexicography, although the differences between the nature of the lexical objects studied caused the development of Terminology's own theories on the lexical elements of a language and Terminology's own methodology based on such theories. This allows considering Terminology as a science separated from Lexicography.

“Terminology” is a polygenic word referring to three different aspects related to compilation, description and presentation of terms:

- Terminology as a theory: this is a collection of premises, arguments and conclusions on the relations between concepts of the words used to represent them and the nature of such words.
- Terminology as a practice: this is a collection of practices and methods, resulting from putting the theory into practice, that allows bringing out the compilation, description and presentation of terms according to Internationally standardized techniques. All in all, it is the collection of activities leading to the preparation of dictionaries<sup>2</sup>.
- Terminology as a thesaurus: it is the structured collection of all the words and expressions used in a specific science. It results from the application of terminological theory and practice. It could be said that a terminology, in this sense, is a specialised dictionary –the specialization is the belonging to a

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<sup>1</sup> CABRÉ, M.T. (1993): La terminología. Teoría, metodología, aplicaciones,

<sup>2</sup> Barcelona, Ed. Antártida. GUTIÉRREZ RODILLA, B.M. (1998): La ciencia empieza en la palabra

specific subject, a specialised field of knowledge. Thus, in this case, the word “terminology” needs to go with the name of the science whose terms have been compiled (for instance, chemical terminology, computing terminology, linguistic terminology, etc.)

Some authors make the difference between Terminology and Terminography (similar to the distinction between Lexicology and Lexicography). In this case, Terminography is the art of making “terminologies”, meaning “specialized dictionaries”. So, to these authors Terminology encloses the theoretical component and the result of applying the terminological theory and practice (the specialized dictionary).

The reality around us is made up of a wide variety of objects that are observed or simply seen. The human mind is able to perceive every objects and generate a conceptual image that allows recreating the object even if it is not within our senses’ reach. In human communication, it is necessary to represent an object concept with a material and recognizable with the means available for humans. In a verbal language such representation is the word –oral or written– and the term in specialized communication.

Thus, the term, as with any other word, is a sign with a triple dimension:

- Linguistic: the signifier (the formal aspect of the term).
- Cognitive: the meaning of the concept represented by a term.
- Ontological: the referent, the object from reality to be named.

The three dimensions give three different, but related, aspects of terms:

- Linguistic dimension – symbolic aspect: this refers to a term as a symbol representing an object, a referent.
- Cognitive dimension – conceptual aspect: in relation to the concept that allows the human mind to keep the referent.
- Ontological dimension – referential aspect: the referent itself to be named and understood.

### **Dimensions of a term**

**cognitive linguistic ontological**

## **concept term referent**

## **conceptual symbolic referential**

### **Aspects of a term**

To the three dimensions already explained, it is possible to add a fourth one that is implicit at the beginning of this section, the communicative dimension (associated with a discursive aspect). According to this dimension, the terms are inserted in a discourse with the purpose of taking part in the message produced in a communicative event. From this communicative point of view, the sender of the message, the author of the text, uses each term with a sole meaning, regardless of whether it is the term's meaning, one chosen among the different concepts and referents represented by a single polygenic term, or an altered, modified or adulterated meaning that the author assigns to a term accidentally (perhaps due to a lack of competence in a specialized knowledge) or intentionally (a personal use of language and terminology).

The balance in the relations between the different dimensions and aspects defines the characteristics of each term, but not all the terms share the same level of relations, that is why the features of terms as a whole are more of a trend, desired by their producers and users, than a reality.<sup>3</sup>

### **Precision**

If a term is precise, then its communicative dimension is unchanging, it means, its meaning does not depend on the context, the discourse in which it is inserted nor the sender of the message nor any other factor of a communicative event.

This does happen in the standard communication.

Terms have to submit three conditions to be really precise, according to Gutiérrez Rodilla:

- Its meaning has to be previously delimited.
- This meaning has to be monosemic and there has not to be any synonym.

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<sup>3</sup> Capellades, Ediciones Península, S.A. SAGER, J.C. (1993): Curso práctico sobre el procesamiento de la terminología, Humanes, Fundación Germán Sánchez Ruipérez Gutiérrez Rodilla (1998: 88-94) the features of terms are precision, emotional neutrality and stability

- The relation established among the terms of a system has to be the same as the one among the concepts.

These three conditions are referred to as the immutability of the cognitive dimension. This dimension can be altered in other fields of communication because of emotional reasons, perhaps to ease the content or the purpose of a message, but in a specialised text terminological imprecision is associated by the experts in the topic with conceptual imprecision.

Let us study each of the three conditions.

- Its meaning has to be previously delimited.

To delimit the meaning of a term, it is necessary to enunciate a definition to establish a relation between the term and the concept. Such definition allows comparing the term with others already existing and defined in order to recognise the differences.

In the standard register, words also have their definitions, but the meaning of the words can be altered in standard communication to introduce the feeling, expressivity, and creativity of the speakers. This should not happen with terms in specialized communication, since the main purpose of such communication is, generally, the transmission of objective information that cannot be altered by any feeling, expressivity nor creativity. We said “generally” because there are situations where specialized communication for other purposes, in addition to the transmission of information, can be observed. Such is the case of publicity in specialized media (e.g. the advertisement of a machine published in a journal on a certain productive sector aimed at experts; the purpose of the advertisement is to persuade the receiver of the message that the machine is good enough to be bought).

- This meaning has to be monogenic and must not be a synonym.

A term is monogenic when it has only one meaning, representing a single concept. If a monogenic term has, in addition, no synonym, there is a univocal relation between term and concept leading to precision. This animosity is more usual among terms in specialized communication than in the standard register

in which polysemy and synonymy are numerous.

It may be possible that a term is monogenic in the field of a science, but has, at the same time, several meanings in other sciences and in the standard register; in this case, there is a univocal relation in such field.

- The relation established among the terms of a system has to be the same as the one among the concepts.

Terms represent concepts related among themselves in the field of a science according to the nature of the concepts (mathematical theorems, kinds of laws, parts of the human being, etc.) Each science establishes the way its concepts are classified, generating hierarchical relations or other types of relations among them. Terms, that are images of those concepts, are also related among themselves with the same relations as the concepts. Thus, we can find hyperonyms, hyponyms, co hyponyms<sup>4</sup>.

In non-specialized communication we do not always find these logical relations among words. For instance, in the standard register there are differences between beef, cow, bull, and ox, but for a zoologist all of them all are individuals of the same species, *Bos taurus*, regardless the gender and the age.

Before outlining the features and peculiarities of terms, it is important to note how term can be defined. Term can be defined as linguistic designations of specialized concepts. They are more precise than non-terms and belong to systems of terms that correspond to concept systems. It is well-known fact that mostly people associate terms with nouns, even though they can be adjectives, verbs, and adverbs may also be terms. Term formation mainly follows the same rules as does general language vocabulary. Term formation can be carried out in a specific environment, e.g. in a research laboratory, in a manufacturing company, at a conference, in a small enterprise, etc. Usually, term formation is influenced by the subject field in which it carried out, by the nature of the persons involved in the

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<sup>4</sup> References CABRÉ, M.T. (1993): *La terminología. Teoría, metodología, aplicaciones*, Barcelona, Ed. Antártida.

process of designation, by the stimulus causing the term formation, and of course, by the phonological, morpho-syntactical and lexical structures of the language.

As for the formation of terms according to Sager, two types of term formation can be distinguished in relation to pragmatic circumstances of their creation: primary term formation and secondary term formation. Primary creation accompanies the formation of a concept and is monolingual. Secondary term formation occurs when a new term is created for an existing concept in the following two cases:

1) as a result of the revision of a term in the framework of a single monolingual community, e.g. creation of a term in the concept of a normative document(standard) or rebaptism of a term as a result of the discovery of a new entity in the same subject field(e.g. “telephone” is now referred to as “fixed telephone” following the discovery of the “mobile telephone”);

2) as a result of transferring knowledge to another linguistic community in which a corresponding terms needs to be created. Primary and secondary term creation are governed by different motives and show the following differences:

1) in the case of primary term formation of a term there is no pre-existing linguistic entity, even though appropriate term formation rules exist. With secondary term formation, there is always an already existing term, which is the term of the source language, and which can serve as the basic for secondary formation;

2) primary formation is often quite spontaneous, whereas secondary formation is more frequently subject to rules and can be planned.

Terms are the linguistic representation of concepts. However, contrary to the situation prevailing in general language, where the arbitrariness of the linguistic sign is fully acceptable, special languages endeavor to make the process of designation systematic, based on certain specified linguistic rules, so that terms

reflect the concept characteristics they refer to as precisely as possible. The aim of systematization of these principles is to achieve transparency and consistency in linguistic representation of knowledge. The following general linguistic schemes serve both of these principles:

### **Types of terminology**

A distinction is made between two types of terminology work:

- **Ad hoc work on terminology**, which deals with a single term or a limited number of terms
- **Systematic collection of terminology**, which deals with all the terms in a specific subject field or domain of activity, often by creating a structured ontology of the terms within that domain and their inter relationships.

Ad hoc terminology is prevalent in the translation profession, where a translation for a specific term (or group of terms) is required quickly to solve a particular translation problem

Other more general recommendations which should be observed when connecting concepts to terms

- linguistic appropriateness: proposed terms should follow familiar and established patterns of meaning which are in use, e.g. the term “atomic energy” is confusing because it implies that this is energy produced by atoms, as opposed to the term “nuclear energy” which is semantically and scientifically more precise;

According to E.Mantzari and K.Valeontis the following methods of term formation are applied and recognized in the English language

- 1) creating new forms;
- 2) using existing forms.

New terms can be formed by using existing forms by the following ways: conversion, terminologization, transterminologization.

Conversion, one of the principal ways of forming terms in English is highly productive in replenishing the English word-stock with new words. The term

conversion, which some linguists find inadequate, refers to the numerous cases of phonetic identity of word-forms, primarily the so-called initial forms, of two words belonging to different parts of speech.

### **Emotional neutrality**

The use of terms has to be free of affective, personal or subjective components, that are observed in the standard register. They affect to the conceptual content of the transmitted information, which modifies the message and makes communication more difficult. Only when the sender and receiver know the emotional components used, can communication be kept correct. In specialized fields the emotional interference is categorically rejected.

The emotional neutrality of terminologies fades when sciences cross their Specialized fields and some terms are used in the common language. Thus, “parasite”, Biology’s term used to name an animal or vegetal living in, with or on another organism, and feeding from it, has in the standard register the meaning of a person living at other people’s expense from a socio-economical point of view. Similarly, in Psychology, “hysteria” is a mind disorder, while in the common language it is used in a figurative way to represent behaviors exhibiting emotional excess<sup>5</sup>.

### **Stability**

Stability refers to the validity of a term (with its concept and referent associated) over time. This desired stability is not always achieved, since as research goes on, the concepts are modified and, consequently, the meaning of terms changes or is even erased.

Over time, two research groups may generate two different terminologies; the use of one or both terminologies may imply the agreement or recognition of one of the research lines, which influences the neutrality of terms

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<sup>5</sup> GUTIÉRREZ RODILLA, B.M. (1998): *La ciencia empieza en la palabra*, Capellades, Ediciones Península, S.A.

## **1.2 The Medical Terms and their Classification**

In these days of economic uncertainty, career change is a hot button issue. As baby boomers retire and leave the work force, employers are concerned about the shortage of skilled workers. In addition, corporate cost cutting, off-shoring, layoffs, and forced career changes leave many workers with difficult choices. Gone are the days of one job and one employer for life. Following a career path today can mean maneuvering many twists and turns, setbacks, side roads, and blind alleys. Where is the roadmap to a new career that provides enrichment, stability and growth potential?

One of the best ways to ease some of the uncertainty and increase your marketability quotient is to broaden your skill set. Since continuing education is often required to maintain licenses and certifications, make those education hours do double duty. The right training can mean more opportunities in your current field, and serve as a stepping stone to a new career. But which industries offer the best chance for job stability and advancement?

It is predicted that expanding healthcare and healthcare-related industries will require many additional skilled workers in the coming decade. According to Forbes Magazine, "As well-heeled baby boomers age, look to the health care industry. Between 2004 and 2014, seven of the 10 fastest-growing jobs in the U.S. will be in health care." In addition to careers directly involved in patient care, demand for support professionals such as medical records and health information technicians, therapists, counselors, and medical transcriptionists will increase.

A basic requirement for entry into almost any healthcare-related career is a command of medical terminology. The ability to recognize, understand, spell, and pronounce basic medical terms, identify medical abbreviations, and decipher unfamiliar words using roots, suffixes and prefixes is a necessary tool to perform well in any medical setting. Medical terminology courses are widely available in online, home study and instructor-led formats. Because medical technology

advances rapidly, medical terminology evolves to keep pace. To stay on top of new terminology, consider taking the course again if you've taken it in the past<sup>6</sup>.

**Medical terminology** uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals. Medical terminology it is critical that you have strong working knowledge of medical terminology. The language of medicine is primarily derived from ancient Greek and Latin. Medical terminology is used in international language, and it is also necessary for communication with other medical personnel. The wider your vocabulary base, the more component you seem to the rest of the medical community and the better patient care you will be able to provide. Understanding terminology involves breaking words down into their separate components of prefix, suffix and root word and having a good working knowledge of those parts.

This includes a group of diseases in distant organs which are caused by the presence of a focus of infection in the oral cavity. It is assumed that micro-organisms, toxins and other substances produced during tissue decomposition are spread via blood and cause a secondary disease in distant parts and organs of the body. In fact, every chronic inflammation can be a focus of infection. Focal infection that is particularly dangerous is subacute bacterial endocarditis because it can develop after the extraction of a root with a focus of infection. This also applies to other diseases such as eye diseases, nervous diseases and joint diseases. Among the most common sources of infection in the oral cavity are devitalized teeth, the inflammation of dental pulp, periodontal pockets or abscesses, odontogenic cysts, retained dental roots, the inflammations of jaw cavities and serious gingival inflammations. It is not simple to make a diagnosis. It is necessary to identify the main cause of problems and analyse the ontogenetic finding. The patient history has to include clinical examinations, including X-ray exam, even in the case of

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<sup>6</sup> <https://www.corexcel.com/articles/medical.terminology.careers.htm>

toothless jaws. Treatment is based on the elimination of an infectious agent. The method of treatment is decided on the basis of the extent of suspicion of focal infection and the seriousness of the finding. If focal infection is suspected, the easiest way of eliminating chronic inflammation is by extracting the tooth. At the same time, the patient is treated for a disease of an essential organ. Extraction is performed under the antibiotic screen. Patients who have recently undergone heart surgery or angiosurgical intervention and patients with congenital and acquired defects of the immune system are very prone to bacteremia. Less serious diseases may not require extraction; high-quality endodontic treatment or therapy of gingivitis is recommended in such cases.

Medical terminology is language that is used to accurately describe the human body and associated components, conditions, processes and procedures in a science-based manner. Some examples are: R.I.C.E., trapezius, and altissimo dorsa. It is to be used in the medical and nursing fields. Suffixes are attached to the end of a word root to add meaning such as condition, disease process, or procedure.

Decoding the medical term is an important process, (See: Morphology). Once experience is gained in the process of forming and decoding medical terminology, the process becomes easier. One approach involves breaking down the word by evaluating the meaning of the suffix first, then prefix, and finally the word root. This will generally produce a good result for the experienced health care professional. When in doubt, the result should be verified by a medical terminology dictionary. The process of learning any new language, such as medical terminology, is facilitated by learning basic rules.

One quick online reference is a dictionary search engine. This allows one to enter a medical term into a dialogue box and initiate a search. There are also numerous online medical dictionaries to select from. Once a term is located, the response will be subdivided into several basic formats, including General usage, Medicine, Law, Business, and others. The use of a medical dictionary or Internet search engine is most helpful in learning the exact meaning of a medical term.

However, if the basic concepts of word building are understood, many words are understandable to the student of medical terminology.

In the process of creating medical terminology, certain rules of language apply. These rules are part of language mechanics called linguistics. So, when a term is developed, some logical process is applied. The word root is developed to include a vowel sound following the term to add a smoothing action to the sound of the word when applying a suffix. The result is the formation of a new term with a vowel attached (word root + vowel) called a combining form. In English, the most common vowel used in the formation of the combining form is the letter -o-, added to the word root.

**Prefixes.** A prefix appears at the beginning of a word and generally describes location and intensity. Prefixes are frequently found in general language (ie, autopilot, submarine, tricycle) , as well as medical and scientific terminology. When a medical word (ventilation) contains a prefix (hyper), the meaning of the word is altered (hyperventilation). Not all medical terms have prefixes. By learning to recognize a few of the more commonly used medical prefixes, you can figure out the meaning of terms that may not be immediately familiar to you . Prefixes do not normally require further modification to be added to a word root because the prefix normally ends in a vowel or vowel sound, although in some cases they may assimilate slightly and an in- may change to im- or syn- to sym-.

**Suffixes.** Suffixes are placed at the end of words to change the original meaning. In medical terminology, a suffix usually indicates a procedure, condition, disease, or part of speech. A commonly used suffix is -itis, which means «inflammation » When this suffix is paired with the prefix arthro-meaning joint, the resulting word is arthritis, an inflammation of the joints. Sometimes it is necessary to change the last letter or letters of the root word or prefix when a suffix is added to make pronunciation easier. Suffixes are categorized as either (1) needing the combining form, or (2) not needing the combining form since they start with a vowel.

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**Root words.** The main part or stem of a word is called a root word. A root word conveys the essential meaning of the word and frequently indicates a body part. Using a combining form, the root word and a combining vowel such as a, i, e, o, or a, may be combined with another root word, a prefix, or a suffix to describe a particular structure or condition.

A frequently used term in EMS is CPR, which stands for cardiopulmonary resuscitation. When we break it down, cardio is a root word meaning «heart» and pulmonary is a root word meaning «lungs». By performing CPR we introduce air into the lungs and circulate blood by compressing the heart to resuscitate the patient. Some root words may also be used as prefixes or suffixes.

Abbreviations take the place of words to shorten notes or documentation. When using abbreviations on patient care reports, remember to use only standard accepted abbreviations to avoid confusion and errors.

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In these days of economic uncertainty, career change is a hot button issue. As baby boomers retire and leave the work force, employers are concerned about the shortage of skilled workers. In addition, corporate cost cutting, off-shoring, layoffs, and forced career changes leave many workers with difficult choices. Gone are the days of one job and one employer for life. Following a career path today can mean maneuvering many twists and turns, setbacks, side roads, and blind alleys. Where is the roadmap to a new career that provides enrichment, stability and growth potential?

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Magazine, "As well-heeled baby boomers age, look to the health care industry... between 2004 and 2014, seven of the 10 fastest-growing jobs in the U.S. will be in health care." In addition to careers directly involved in patient care, demand for support professionals such as medical records and health information technicians, therapists, counselors, and medical transcriptionists will increase<sup>7</sup>.

It is well known from a long-time praxis that isolated injuries of the facial skeleton, the teeth and soft tissues do not usually evoke a traumatic shock. This complication may appear, however, with combined injuries or poly-traumas<sup>8</sup>.

### **The definition**

The term shock designates a severe, general hemodynamic and metabolic disorder caused by insufficient blood supplies. Three basic parts of the blood circulation are affected during the shock:

- loss of circulation
- defects in permeability of vessels
- heart output decrease

The result is a decrease of the nutritional blood supply to the vital tissues and hypoxia. Insufficient removal of metabolites from tissues causes an acidosis.

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<sup>7</sup> FOR STUDENTS OF GENERAL MEDICINE Supplement to the university textbook professor

MUDr. Jiří Vaněk, CSc. et al 2009

<sup>8</sup> Professor Josef Bilder, M.D. Assoc. Prof. Boris Bílý, M.D. Assoc. Prof. Zdeňka Halačková, M.D 1997

<sup>9</sup> Professor Josef Bilder, M.D. Assoc. Prof. Boris Bílý, M.D. Assoc. Prof. Zdeňka Halačková, M.D 1997

Irreversible damages to important organs originate from a developing shock: “shock kidneys”, “shock lungs”<sup>9</sup>.

## **Causes of a shock**

Hypovolaemic shock:

- hemorrhagic: blood losses, low damage of tissues
- traumatic: large damage of tissues
- burns related: losses of plasma
- dehydration related: losses of water (diarrhea, vomiting)

Other types of shocks: cardiogenic, septic, anaphylactic.

## **Stages of a shock**

*The first stage - compensation*

Independently of a shock causes, the volume of circulating blood changes (macrocirculation), as well as specific shock-related changes of circulation inside blood vessels (microcirculation). At the first stage, the organism protects itself by a sympathetic-adrenergic reaction, releasing of catecholamines and excitation of adrenal cortex, in order to maintain homeostasis.

Excitation of alpha-receptors of sympathetic nerves leads to closure of pre- and post-capillary sphincters which causes decrease of blood supply to organs depending on the degree of their alpha-adrenergic innervation (splanchnic organs, kidneys, liver, skin). On the other hand, coronary and brain circulations remain unaffected - *centralization of circulation*. The vital organs continue to be supplied with nutrients.

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### *The second stage - decentralization of circulation*

After the first stage, a shock deepens and without a compensation, serious metabolic malfunctions occur, tissue hypoxia and acidosis (lactate, ketoacids) increase, damages of cell membranes are caused by failure of the sodium-potassium pump (retention of  $\text{Na}^+$  and losses of  $\text{K}^+$ ).

*Decentralization of circulation* appears, blood flows into the interstices after an initial peripheral spasm. Microcirculation specific changes also happen, characteristic by hemo-concentration, platelets sticking together, increasing blood viscosity, formation of thrombi, defects of DIC (disseminated intravascular coagulation) and appearance of consumptive coagulopathies.

A decompensated shock originates at this stage!

A basic requirement for entry into almost any healthcare-related career is a command of medical terminology. The ability to recognize, understand, spell, and pronounce basic medical terms, identify medical abbreviations, and decipher unfamiliar words using roots, suffixes and prefixes is a necessary tool to perform well in any medical setting. Medical terminology courses are widely available in online, home study and instructor-led formats.

Because medical technology advances rapidly, medical terminology evolves to keep pace. To stay on top of new terminology, consider taking the course again if you've taken it in the past.

The Department of Labor database lists seven nontraditional careers that require medical terminology.

Medical Transcriptionists - To understand and accurately transcribe dictated reports, medical transcriptionists must understand medical terminology, anatomy and physiology, diagnostic procedures, pharmacology, and treatment assessments. They also must be able to translate medical jargon and abbreviations into their expanded forms.

Medical Records and Health Information Technicians - In addition to general education, coursework requirements for medical records and health information technicians includes medical terminology, anatomy and physiology, legal aspects of health information, health data standards, coding and abstraction of data, statistics, database management, quality improvement methods, and computer science.

## **Summary on Chapter I**

In this particular chapter we tried to overview actually some issues such as what is the terms and about medical terminology , going back to its history; we analyzed a role of medicine.

As a natural, we used the general information was obtained form the web-sites of Internet. Having observed what a medical terms is we tried to look into the meaning of it differs completely from other ones.

In this chapter, we overviewed the ways of translation medical terminology, looking into the main levels of it. Also Classification of medical terms. Scientific novelty is determined by the necessity of detailed and comprehensive analysis of the term is related to the stomatology, which have never been studied before.

Thus, writing this chapter we tried to build the theoretical basis of our qualification paper.

## **Chapter II. Specificity of medical terms in the sphere of Stomatology**

### **2.1 General characteristics of stomatology**

Stomatology is one of the basic medical fields. It studies diagnostics, treatment and prevention of diseases affecting teeth, oral cavity and tissues and organs which are topographically associated with it. Stomatology services are provided mainly in the form of an outpatient care, just a small part of the care is provided by inpatient stomatological facilities.

Stomatology as medical field has more than a 100-year-long history in the Czech Republic. In the 1920s, it became part of university courses. Nowadays, it is a separate medical field that is studied in a specific, accredited Master's degree study programme, as provided by law, focussing on the prevention, diagnosis, treatment and research into diseases and developmental disorders of teeth, dentition and tissues in the oral cavity including adjacent organs and tissues. The term "dental medicine" is being increasingly used instead of the term "stomatology".

The main aim of current stomatology – dental medicine – is to ensure the adequate level of oral health in all age categories of population. It is based on current scientific knowledge and on internationally recognized programmes for improving the quality of health outlined in the documents and objectives of the World Health Organization (WHO) for 2010, The Charter of Rights and Freedoms, The Charter of Children's Rights, etc. In this respect, it creates the conditions for a systematic improvement in the quality of dental care and oral health for all individuals.

The basic goal of dental medicine is to treat dental diseases using the most recent therapeutic approaches, scientific knowledge and the results of research. Preventive care is a method that is gaining more and more importance. It must be applied consistently and emphasize the role of health consciousness of an individual

and family, in accordance with the goals outlined in the National Health Programme<sup>10</sup>

Today's stomatology is a field that employs exclusively university-educated professionals, i.e. doctors after graduation from five to six years long studies at a university.

A doctor-stomatologist's coworkers are health services staff: a nurse, a dental technician, an X-ray technician, and a dental hygienist.

Among the basic stomatological fields there are therapeutic stomatology, orthopedic stomatology, and surgical stomatology.

Therapeutic stomatology (protective, conserving stomatology) deals with the diagnostics, treatment and prevention of a dental decay and its complications. Associated with this basic stomatology branch there are: children's stomatology (pedostomatology, pedodontics) that deals with the care of the milk dentition or the developing permanent dentition of youngsters<sup>11</sup>.

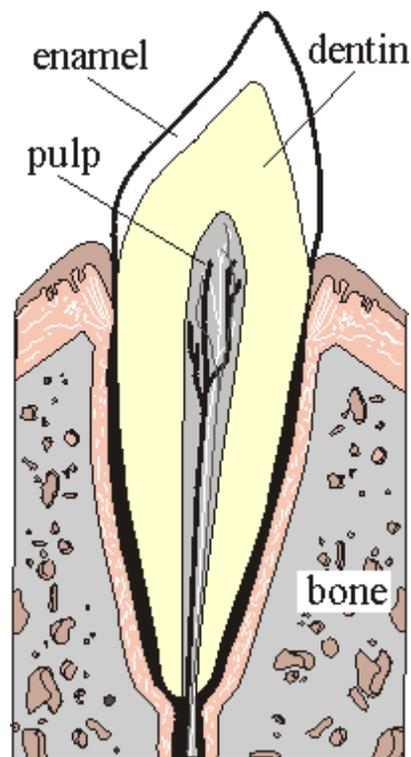
Periodontics deals with diseases of the periodontium tissues and the oral cavity mucous membrane diseases.

Orthopedic stomatology (dental prosthetics) deals with the replacement of parts of crowns, individual teeth losses or provides for the total replacement of lost teeth by the production and application of various dental prostheses (crowns, bridges, removable dentures). An individual specialty is orthodontics (orthopedics of jaws) that deals with the diagnostics, treatment and prevention of irregularities of the individual teeth, groups of teeth and anomalies of jaws.

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<sup>10</sup> Professor MUDr. Jiří Vaněk, CSc. et al. Brno 2009 , 7page.

<sup>11</sup> Ministry of Health of the Czech Republic from 2001 and Act No. 95/2004 Sb.



Surgical stomatology deals with the surgical treatment of the oral cavity diseases (dent alveolar surgery) or as a specialty (maxillofacial surgery) provides for surgical treatment of larger or facial diseases, mainly in the form of the inpatient care.

A graduate of the stomatology studies is prepared both theoretically and practically for the praxis in prevention and cure in the basic stomatology fields. He or she receives only general knowledge in the specialized disciplines that allow for a responsible decision of a consequent treatment at highly specialized dental offices. As a graduate student he or she can receive a higher degree of qualification after passing necessary examinations and continue to work as a specialist in orthodontics or maxillofacial surgery fields.

Decalcification starts on the enamel surface, the original structure of enamel changes, the crystals of hydroxyapatite loose the regular arrangement and the loss of minerals causes the enamel to become “spongy”. In the beginning, when

no defect is visible, the lesion is without cavity. With a gradual loss of minerals, the enamel decomposes which results in a defect – dental cavity, i.e. lesion with a cavity. The course of dental decay in dentin is faster than in the enamel since dentin contains a lower amount of minerals. If the dental caries is not detected in its early stages, it will enlarge.

The carious lesion consists of caverns filled with micro-organisms that produce acids and proteolysis enzymes. Dental caries can be divided according to different factors. Primary caries is formed on the surface of a tooth that has not been treated; secondary caries is associated with the filling that has been carried out. Workers in bakeries and mills exhibit dental caries due to occupational exposure to sugar and flour dust that accumulate on the surface of their teeth. Such dental caries usually occur around the dental necks. Carious cavities can be divided according to their size or depth as follows: superficial caries (it only involves the enamel), medium caries (it affects dentin) and caries in the vicinity of the dental pulp (it is in the close vicinity of the dental pulp). Clinical symptoms depend on the size and localization of dental caries. Initial stages of dental caries are completely asymptomatic.

When cavitations occurs, the caries can manifest itself by increased sensitivity to thermal (particularly cold) and chemical stimuli (sweet, salty and acid-tasting foods and beverages), the adhesion of food or by sensitivity during biting when some food is pressed into the carious cavity. If the caries is close to the dental pulp, the symptoms may be severe but it is not always the case. The dental pulp can fight effectively against the spread of dental caries by producing protective dentin at the place of the carious cavity. It is less permeable and represents a barrier against penetrating harmful substances. Dental caries that were not treated early will cause the inflammation of dental pulp (pulpitis).

Careful examination and a qualified evaluation of its results may suggest a lot on the nature of a patient's illness.

## **Treatment of periodontitis**

An approach to therapy is based on the evaluation of the importance of the causal tooth to the dentition, the anatomy of the tooth (the treatability of root canals, the condition of periodontium, an extent of damage to the dental crown), the patient's general state of health and compliance. The trepanning of a pulp cavity – the opening of the pulp cavity and the cleaning of the root canal - will bring immediate pain relief to a patient with acute periodontitis as it will release the exudate. After acute symptoms disappear, endodontic treatment is performed. It includes the removal of infected mass from the pulp cavity and root canals, the enlargement and hermetic filling of root canals<sup>12</sup>.

The same procedure is applied in the case of chronic periodontitis where the acute phase is missing. If root canals are accessed to entirely and filled, one can expect the consolidation of tissues in the vicinity of the apex, the healing of fistula and bone apposition. Surgical intervention will not be necessary. The subperiosteal and submucous forms usually require an incision and the prescription of antibiotics in the case of the general alteration of the organism. Surgical solution such as the amputation of the root apex or hemiextraction as a supplement to conservative therapy depends on the outcome of endodontic treatment. In the absence of problems, surgery can be performed in at least 6 months.

Conservative treatment can be performed either at a single visit or at multiple visits with intervals allowing to filling the root canal with a paste containing calcium hydroxide. The final filling of the root canal is made using gutta-percha combined with a plastic root filling as mentioned in the previous chapter. Extraction is an alternative to the conservative approach. It is performed after the careful consideration of all indications. Inflammation that has spread beyond the periodontal fissure can have one serious complication which is the

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<sup>12</sup> Professor MUDr. Jiří Vaněk, CSc. et al. Brno 2009 page 10-13

propagation of inflammation into the space around the jaws and the development of inflammation around the jaws which is life-threatening for a patient.

Such cases require immediate cooperation with a dentist specialized in dental surgery. The causal tooth will always be extracted, the patient will be given antibiotics and the incision of abscesses and wound drainage will be necessary.

### **Focal infections of odontogenic origin**

This includes a group of diseases in distant organs which are caused by the presence of a focus of infection in the oral cavity. It is assumed that microorganisms, toxins and other substances produced during tissue decomposition are spread via blood and cause a secondary disease in distant parts and organs of the body. In fact, every chronic inflammation can be a focus of infection. Focal infection that is particularly dangerous is subacute bacterial endocarditis because it can develop after the extraction of a root with a focus of infection. This also applies to other diseases such as eye diseases, nervous diseases and joint diseases.

Among the most common sources of infection in the oral cavity are devitalized teeth, the inflammation of dental pulp, periodontal pockets or abscesses, odontogenic cysts, retained dental roots, the inflammations of jaw cavities and serious gingival inflammations. It is not simple to make a diagnosis. It is necessary to identify the main cause of problems and analyse the ontogenetic finding. The patient history has to include clinical examinations, including X-ray exam, even in the case of toothless jaws. Treatment is based on the elimination of an infectious agent. The method of treatment is decided on the basis of the extent of suspicion of focal infection and the seriousness of the finding. If focal infection is suspected, the easiest way of eliminating chronic inflammation is by extracting the tooth. At the same time, the patient is treated for a disease of an essential organ.

Extraction is performed under the antibiotic screen. Patients who have recently undergone heart surgery or angiosurgical intervention and patients with congenital and acquired defects of the immune system are very prone to bacteremia.

Less serious diseases may not require extraction; high-quality endodontic treatment or therapy of gingivitis is recommended in such cases.

### **Non-carious changes in dental tissue**

Inheritance or the presence of harmful substances is affecting the development of dental tissue play an important role in congenital defects. Amelogenesis imperfecta is one of the best known congenital defects - the enamel has various defects such as staining or it can be so soft that it will abrade soon after tooth eruption and disappear. Dentinogenesis imperfecta is characterized by the brownish colour of teeth and the early obliteration of the pulp cavity. Hereditary damage to the enamel and dentin can be part of general diseases such as osteogenesis imperfecta (teeth have brownish or pink-brown colour, the pulp cavity is missing, roots are short), etc.

Different harmful substances acting during tooth development can cause defects in the formation of hard dental tissue. Inflammation around the germ of a permanent tooth, general diseases accompanied with fever, the excessive intake of fluorides and tetracycline antibiotics are the most common causes of defects in dental tissue mineralization and production. The enamel shows whitish, yellowish or brownish spots, holes, grooves or zones. Teeth damaged by tetracycline antibiotics are characterized by noticeable yellow discolouration. Therapy is based on aesthetic correction using composite materials or on prosthetic treatment.

### **Acquired changes Trauma**

Trauma may involve the dental crown, root canal, periodontium or a combination of all these structures. The method of treatment depends on the size of a defect and a degree of risk to the dental pulp. This may include single reconstruction, the treatment of the dental pulp using calcium hydroxide and the application of a filling, or the extirpation of the dental pulp is performed followed by the filling of the root canal. Fractures of the root and injuries to the periodontium require the splinting of teeth and also endodontic treatment using the shaping effect

of calcium hydroxide applied as a temporary root filling which is repeatedly restored, before the root canal is finally filled.

### **Abrasion, erosion, wedge-shaped defects**

Abrasion is the extreme wear of teeth due to traumatic bite or bad habits. Erosion is a loss of dental tissue caused by acids contained in beverages with the low pH (for example Coca –Cola, juices etc.) or due to decalcification caused by stomach acid in patients with mental anorexia or gastroesophageal reflux disease. People working with acids in chemical plants often show defects due to dental erosion. These defects are usually detected in the cervical region. Wedge-shaped defects are also localized in the cervical region of teeth, being characterized by smooth surface. Factors contributing to their formation include abrasion and the uneven load of teeth that causes the small particles of the enamel to break off. Treatment of these defects relies on the elimination of causes and the replacement of lost dental tissue with suitable filling materials<sup>13</sup>.

During an intra-oral examination, an attention is paid to the whole oral cavity. Not only the teeth should be examined, but also the mucosa of alveolar ridges, the tongue, the oral cavity base and the cheeks. Attention should also be paid to the ducts of large salivary glands and the appearance of saliva. Individual teeth are examined with the aid of the dental mirror and the probe so that all tooth surfaces can be inspected. The teeth of the permanent dentition are labeled with Arabic numbers from 1 to 8, milk dentition teeth are labeled by roman numerals from I to V. At present, the most frequently used numbering is that recommended by the international stomatology organization FDI (Fédération Dentaire Internationale). The quadrants of upper and lower jaws are labeled with numbers both for milk and permanent teeth.

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<sup>13</sup> Professor MUDr. Jiří Vaněk, CSc. et al. Brno 2009 page 27-30

|   |                 |                |
|---|-----------------|----------------|
| The permanent dentition quadrants are labeled as follows: |                 |                |
| upper jaw   | right side<br>1 | left side<br>2 |
| lower jaw   | 4               | 3              |

|   |                 |                |
|---|-----------------|----------------|
| The <u>milk dentition</u> quadrant labeling is the following: |                 |                |
| upper jaw   | right side<br>5 | left side<br>6 |
| lower jaw   | 8               | 7              |

The quadrant number precedes a number that marks an individual tooth. For instance, the upper right canine tooth of the permanent dentition will be marked as 13, the same tooth of the milk dentition will be marked as 53.

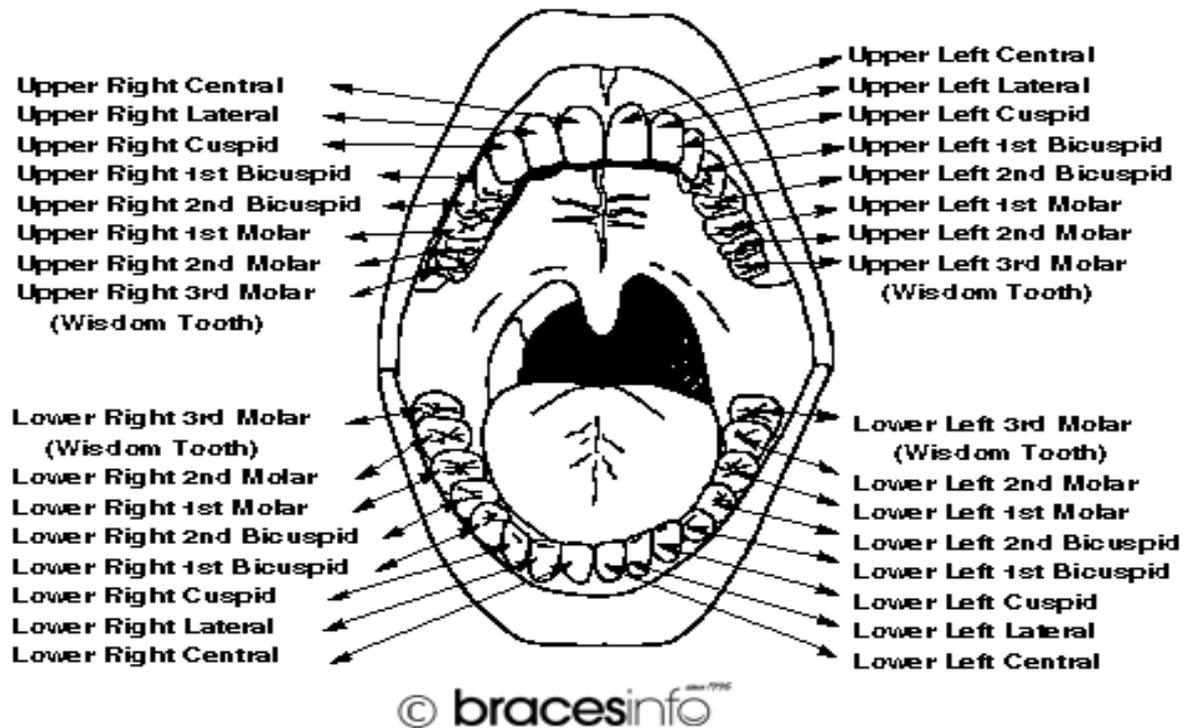
Auxiliary examination methods complement the basic clinical examination. Besides some specialized methods (monograph, thermograph), the most important is the X-ray examination. The intra-oral X-ray examination provides for an image of teeth and alveolar ridges, the extra-oral X-ray examination renders an image of the facial skeleton or the mandibular joint.

Tomography provides for more detailed data by imaging a pre-selected layer of an object in a certain depth. Computer tomography (CT) is utilized in surgical

dentistry mainly for imaging of the or facial area tumors or during some injuries of the upper or middle third of the facial skeleton. The panoramic examination on the Status X instrument yields a surveying X-ray of teeth, e.g. when examining for a focal infection. Concurrent imaging of both jaws, nasal and maxillary sinuses and mandibular joints can be achieved by the orthopantomographic examination, e.g. using the AVANTEX instrument (Chicane). An X-ray exam with the use of contrast compounds is also frequently used. These compounds (e.g. iodinated oils - Lipoid, or the barium suspension) absorb more X-rays than the surrounding tissues thus creating a positive contrast. This means of examination enables to follow morphological and functional manifestations of normal or pathologically altered organs, especially the large salivary glands (sialography), changes of the maxilla sinuses epithelium (orthography), eventually localization of cysts at the or facial area (cystography).

Results of these examination methods can help significantly with determination of the correct diagnosis of an illness.

During a treatment of dental caries and its consequences we should consider whether we treat a temporary or permanent tooth and what stage of development the tooth and its root are at. A degree of a root's desorption should be evaluated on X-ray images of temporary teeth. Principles of a cavity preparation are the same for children's temporary and permanent teeth as for adults, except the temporary frontal teeth. The same filling materials are used, just Velcro should not be used for temporary teeth and permanent teeth with an incomplete root development. Resorbing filling materials should only be used for filling of root canals of temporary teeth. In case of permanent teeth with complete development, methods of treatment and materials for root canals filling are the same as those for adults.



Endodontic treatment of teeth with incomplete development is very difficult. If a root is very short, one should not hesitate to perform an extraction, even at frontal region. In case of partial pulp inflammation, a vital pulp tom of a crown pulp is performed. A typical method of children's stomatology is amplification that has been used successfully for the following diagnoses: pulp necrosis, gangrene, and acute periodontitis. The method decreased to a minimum the need for surgical-conservative therapy of teeth with incomplete development (so called filling under visual control). The amplification method is based on high biological activity of the tissue at an open root apex (mesenchymal papilla). Teeth with the above described diagnoses are filled repeatedly with Calyx. The root's closure should occur at 6 to 24 months, although the root may remain shorter. Indeed, it may reach its normal length (so called epigenesis).

### **Surgical Stomatology**

The most common dental surgeries of children's age is tooth extraction. It is performed under a surface or injection anesthesia. Temporary teeth with highly

reserved root may be extracted without an anesthesia. Among frequent surgical-conservative treatment of permanent teeth belongs root canal therapy that is practiced at teeth with radicular cysts or granule, eventually in case of the edification method failure. Injuries of temporary and permanent teeth represent a separate topic, described below. In case of temporary dentition, sub-luxations or luxation of teeth are quite often seen. Rather than hard teeth tissues, a tooth socket that is still highly elastic is affected upon an impact.

The slightest and prognosticative most favorable injury of the dental supporting apparatus is contusion. At this injury, a mushy food is recommended and the dental pulp vitality is checked periodically. In case of the pulp necrosis, therapy should be applied according to principles of restorative stomatology with respect to the stage of development of the root.

Sub-luxation is a common temporary teeth injury. A slight sub-luxation requires the same therapy as contusion, more sever cases require repositioning of sub-luxated teeth followed by immobilization with a fixed splint. An increased care of the dental hygiene and a pulpy food are recommended. If the pulp of sub-located teeth loses it is vitality, therapy should be applied according to principles of conserving stomatology. In case that injured teeth has to be extracted, a gap is replaced with a removable denture.

Luxated temporary teeth must not be replanted. There is a danger of damaging permanent teeth germs; the younger a child, the higher the danger. A special kind of luxation is repulsion (intrusion, central luxation) which occurs after an impact at a longitudinal tooth axis and causes partial or total immersion of a tooth to the alveolar ridge. Upper incisor teeth are mostly prone to this type of injury while it is rare for teeth of the lower jaw. This condition does not require any therapy since intruded teeth usually erupt again during 2 - 4 weeks. Teeth should be extracted only if they are intruded into nasal cavity or if they could harm the permanent tooth. Resulting gap should be replaced removable dentures space- maintainers.

Fractures of temporary teeth crowns that do not expose the pulp chamber should be treated similarly as a corresponding injury of permanent dentition. If the pulp is exposed by an injury, a therapy is applied with respect to a stage of development of the tooth. Teeth with advanced root restoration should be extracted. In case of a fracture in the middle third of a root, teeth should be fixed by a splint. Fractures of the apical third of a root are mostly treated by grinding that just excludes an affected tooth from articulation.

## 2.2 Difficulties in the Translation of Stomatology and Ways of Translation

A work of a skilled translator is applied here. For he/she must be good at not only translating skills but also medical sphere as well as its history, development, and many other things. While translating the terms of some field, translator should take into consideration the cultural background of this or that language. It must be done in the way that is acceptable by nation.

While concentrating on terms, it is worth to give some information about them in general. The terms are the words or phrases which have a special and strictly defined meaning in the field of science. They must definitely express the sense, the processes and the names of the objects in any sphere of industry. The terms in medical in the sphere stomatology are not exception, too.

In order to analyze the terms in the defined tools of translation and give their proper translation in Russian and Uzbek, we should, firstly, define the morphological structure of the words.

All terms in their structure we divided into three groups:

- *simple* – bone, pulp, gums, root, caries, cavity;
- *compound* – interproximal, intraoral, pedodontist, radiograph ;
- *phrases* – cross contamination, decalcification, gingival hypertrophy, impacted tooth;

Simple words are found in the frame of only one system and are characterized as monosemantic and they can be as the key words of the given subject.

Compound terms can be found in one system, but they have different meanings depending on the context. For example, the word *intraoral* has the meaning *a mouth*,. According to this it is necessary to look for such kind of terms in the thesaurus or explanatory dictionaries where the given word can be found.

Phrasal terms introduce the chain of words. The main element of these terms is the last word, and the key one is the penultimate word, word combination or compound term. Because of the usual use such terms can be substituted by the abbreviations. For example, *FBS - Fasting Blood Sugar, ECG - Electrocardiogram*

Among the main methods of translation of the stomatology means the following is observed: *Method of semantic development* is applied when a dictionary equivalency of a word does not coincide with the context. For example, the word which is commonly used in stomatology –*root*, it has several meanings in the dictionary: *кочм – suyak (milkda joylashgan tishning pastgi qismi )*. Having studied the given versions in the dictionary and having compared them with the English dictionary of synonyms and an explanatory dictionary, we get the following versions of translation: *основа – tayanch*.

The process of the semantic development suggests to be made in different stages: a) perception of the whole context; b) specification of the meaning of separate words; c) check on the conformity to the context; d) construction of the logical chains; e) a choice of a comprehensible variant; f) check of the words in the whole context. Thus the logical reasoning plays a main role, taking into account the content of the initial text.

Owing to the features of the language while translating from English into Russian or Uzbek the translator is compelled quite often to resort to a various sorts of substitution of separate words, word-combinations, parts of the sentences and translation of the whole sentence to express fully the content of the text being translated in a target language. Substitution happens when changing the word with another one and not changing the sense. Different ways of substitution are defined, such as concretization, generalization, antonymous translation, compensation, extension of thought and perception as a whole. Some of them are applied in the translation of fashion terms.

Necessity in applying the methods of the additions or omissions is often required by the norms of language. For example, the term *Quadrants* is translated as *Четыре часть вашего рта* in Russian. The term is translated by addition, because if we do it as it is given in English, not using the addition, there will be no sense. In Uzbek it will be as *og`iz bo`shlig`ining to`rtta qisimi*.

The omission is also widely used as the addition. For example, *Deciduous teeth* – *молочные зубы* – *sut tishi*. The word *ballerina* does not bear the most necessary sense, so it is not much important to translate it. The words *молочные* and *sut* can give its sense.

During the research we defined four tools of stomatology terms:

- transliteration;
- semantic equivalents;
- calque;
- description

Transliteration is the practice of converting a text from one writing system into another in a semantic way, word by word, or ideally letter by letter. Transliteration attempts to use a one-to-one correspondence and be exact, so that an informed reader should be able to reconstruct the original spelling of unknown transliterated words. To achieve the objective, transliteration may define complex convention for dealing with letters in a source script which do not correspond the letters in a goal script.

For example, the words *dentin, plum, canal, cares, pulp, enamel, aspiration*, are transliterated into Russian and Uzbek as *дентин, пломба, канал, кариес, пульпа, эмаль, аспиратсия*. Both in Russian and Uzbek they are the same.

The second tool of translation of the terms is the using of the semantic equivalents. Analogy is a cognitive process of transferring a word, word

combination or phrase from a particular language to another particular one, and a linguistic expression corresponding to such a process. It is mostly used when the translator finds the Russian or Uzbek root corresponding to the meaning of the English term. For example, *gums* – десны – *milk*, *denture* – протез – *protez*, *cusped* – клык – *so`yloq tish*, *labial* – половые зубы – *o`g`ri tish*, *erup* – вслыхнуть – *tishning tushishi* and so on. From the academic point of view these translations are most adequate, but it is not always possible to pick up full equivalents.

We would like to analyze some stomatology terms used in situations of three languages taken from the book.

Dentist recommend that you **go for a check –up** at least twice a year. At the same time as you see the dentist, you can also make an appointment with the **dental hygienist** who will clean and **polish** your teeth for you. The dentist checks that your teeth are in good condition. If you have a hole, or a **cavity**, you may need a **filling**, which is a small amount of **porcelain** that the dentist uses to fill the hole.

Стоматолог рекомендую вам пойти на проверку по крайней мере, два раза в год. В то же время, как вы видите стоматолога, вы также можете назначить встречу с гигиенист, который будет чистить и полировать зубы для вас. Стоматолог проверяет, что ваши зубы находятся в хорошем состоянии. Если у вас есть отверстие или полость, вам может понадобиться начинку, которая представляет собой небольшое количество фарфора, который использует стоматолога, чтобы заполнить дыру.

Tish shifokorlari bir yilda kamida ikki marta, tish shifokori ko`rigidan o`tishni tavsiya qiladi. Agar siz tish shifokoriga uchrashmasangiz, tish gigenistiga uchrashib tishlaringizni ostki qismini tozalatingiz mumkin. Tish shifokori, sizning tishlaringiz qay holatda ekanligini tekshiradi. Agar kovak yoki bo'shliq bo'lsa, shifokor kovak bo`lgan joyni yopish uchun maxsus yasama emal qorishmasidan, kerakli miqdorda foydalanib davolashi mumkin.

Starting with the phrase term *go for a check- up*. Uzbek version of it is *ko`rikdan o`tish*. Though semantic equivalents of the words are given, the translator made an omission using one word *o`tish* for the translation of two words *go* and *up*. However, the Russian version is the shortest one, as there is an omission in two places. *check- up* is given with one word. The term *cavity* is translated adequately both in Russian and Uzbek languages, using the lexico-semantic translation. The semantic equivalents of the phrase term *dental hygienist* are given adequately in both languages. Though the addition is used in Uzbek translation in the word *porcelain - yasama ( yaltirab turuvchi) emal*. Unlike English or Russian versions, Uzbek translation is wrong translation in using the illnesses. The word *cavity* is given adequately in Russian - *кариес* where as Uzbek version is *tish qurtlashi*, but the English version of this word is *cavity*. The adequate translation is *karies*.

According to the examples above we can subdivide the words into two groups: word-formation and semantic.

Word-formation calques are the words received by morphemic translation of foreign words to Russian or Uzbek. The calques usually are not loan words, as they are made of primordially Russian or Uzbek morphemes. Therefore the real origin of such words seems unexpected for the person, learning etymology of words for the first time.

Semantic calques are the words which have received new values under the influence of corresponding words of another language as a result of transliteration while translating.

If there is no other way to translate the terms, we can rely on the fourth tool of translation, so-called the descriptive translation. In most cases during the translation of terms related to stomatology the translator applies this tool, giving the meaning as shortly as he or she is able. Let's see it in the examples such as *posterior teeth – жевательные зубы – chaynov yoki jag` tishlar* or *primary teeth – первичные или молочные зубы – ilk tishlar yoki sut tishlari*. It is impossible to

give the meaning by calc or analogy. The terms require descriptive translation, of course, we use some additions too.

Many adults have one or more fillings –often in their **back teeth** or **morals**. You may have more serious problems with your teeth and occasionally the dentist will need **to take an X –ray** to see the damage to your teeth more clearly. For example, a tooth may be so rotten that the dentist recommends an **extraction** (where the tooth is removed) or you may need **root canal work**, where the dentist repairs damage to the roots of a tooth. In both of these occasions, you will need an **anesthetic** so that you cannot feel the pain. (Unfortunately, you will still be able to hear the sound of the dentist`s drill, the metal instrument used to open up the tooth.) Some adults also experience problems with their **wisdom teeth**.

Многие взрослые имеют один или несколько пломб в их задних зубов или нравственности. Вы можете иметь более серьезные проблемы с зубами, а иногда и стоматолог должен будет принять рентгенотехника, чтобы увидеть повреждения ваших зубов более четко. Например, зуб может быть настолько гнилой, что стоматолог рекомендует экстракции (где удаляется зуб) или вам может понадобиться работа корневого канала, где повреждение зубной врач ремонт к корням зуба. В обоих этих случаях, вы будете нуждаться в анестезию, так что вы не можете чувствовать боль. (К сожалению, вы все равно будете в состоянии услышать звук сверла, металлический инструмент, используемый, чтобы открыть зуб.) Некоторые взрослые также испытывают проблемы с зубами мудрости.

Asosan katta yoshlilarda orqa jag` tishlari yoki aqil tishlarining ko`p qismi plombalangan bo`ladi. Ularning yemirilishini o`ldini olish uchun shifokor ko`rigidan o`tishingiz va tishlaringizni rentgen qildirishingiz kerak bo`ladi. Misol uchun, tish shifokori tishlaringiz yomon ahvolda bo`lsa olib tashlashi yoki tish kanallari yemirilgan bo`lishi mumkinligini aniqlaydi, va ularni davolash kerakligini aytadi. Agar og'riqni his qilsangiz, siza anesteziya yani og`riq qoldiruvchi ukol kerak

bo'ladi. (Afsuski, siz baribir tishingizni ildizini ochish uchun foydalaniladigan metall uskunaning ovozini eshitib turasiz.) Ba'zi kattalar aqil tishlari bilan muammolarni bo`lishi mumkin.

Here, the words - *morals* transliterated into the English and Russian languages. In both languages they remain the same, as they relate to Latin words. Furthermore, it is not an easy task to define the letters in a source language which do not correspond the letters in a target language.

The term *back teeth* is translated adequately both in Russian and Uzbek languages, using the lexico-semantic translation. The semantic equivalents of the phrase term *wisdom teeth* are given adequately in both languages. Though the addition is used in Uzbek translation in the word *wisdom- aqil tishlar yoki sakkizinchi molyar tishlar*.

If there is no other way to translate the terms, we can rely on the fourth tool of translation, so-called the descriptive translation. In most cases during the translation of terms related to stomatology the translator applies this tool, giving the meaning as shortly as he or she is able.

Let's see it in the examples such as *numerical nation fot teeth*– *численное обозначение для зубов* – *tishlarni sanoq sonlari yordamida atash or quadrants* – *четыре части вашего рта* – *og`iz bo`shlig`ining to`rtta qismi*.

It is impossible to give the meaning by calc or analogy. The terms require descriptive translation, of course, we use some additions too.

Dentists training usually includes complicated **oral surgery**, root canal work, orthodontics (**straightening teeth**), and other complex skills. Yet most dentist rarely do more than pull, **drill**, and **fill teeth** –**skills** that require a fraction of the training they have received. The simple, more common dental problems should be the work of community dental technicians who are on the front lines (the villages), with secondary help from dentists for more difficult problems.

Обучение Стоматологи обычно включает в себя сложную челюстно-лицевой хирургии, работа корневых каналов, ортодонтия (выпрямление зубов), а также другие сложные навыки. Тем не менее, большинство стоматолог редко делают больше, чем тянуть, дрель, и заполнить зубы, которые требуют часть подготовки, которую они получили. Простые, более общие проблемы с зубами должны быть работой общинных зубных техников, которые находятся на линиях фронта (селах), со средним помощь стоматологов для более сложных проблем.

Tish shifokori mutaxassisligi asosan yuz jag` jarrohligini o`z ichiga oladi, tish ildizi kanallari, ortadontiya (tishlarni to`g`ri yo`naltirish) va yana shuningdek bir qancha murakkab ishlarni qamrab oladi. Biroq tish shifokorlari kutilgandan ko`ra ko`proq ish bajarishadi, masalan tishni davolash jarayonida uni maxsus drel yordamida tish kanalini ochish va kovakni tozalab uni yopish. Oddiy, ko`p uchraydigan muommolar umumiy tishning texnik muammolari bo`lib, ular asosan chekka joydagi qishloqlarda uchraydi, markazlashgan joylarda esa tish shifokorlari yanada murakkabroq muommalarga uchraydi.

Here we translated the text in the omission and admission way, the word *straightening teeth- tishlarni to`g`ri yo`naltiruvchi* in Russian version *выпрямление зубов*. The word *drill* translated adequately because this word translated in to Russian *сверло* or *дрель* in Uzbek version it translated *parma yani metallarni maydaluvchi uskuna*. This kind of terms are translated by adequately or with analogy, with definition. It is impossible to give their own meaning. The terms require descriptive translation, of course, we use some additions too.

The term *oral surgery* is also translated with admission way, in Uzbek language it will be *yuz jag` - jarroxligi* in Russian *челюстно-лицевой хирургия*, We add here the word in Uzbek *yuz - jag`* in Russian also the same. If we translate

just the word *oral* it will be another meaning, in to Uzbek it will be *talafuz nuqtasi*, in Russian *относящихся к устью* .

The word *root canal* is translated in word for word translation way *root – ildiz – корен, canal – kanal – канал*. The word *canal* related to transliteration words because in this translation way words translated one by one or we say such kind of words does not change their meanings.

So, not only an adequate version of giving the sense of the initial text are singled out as the main thing in the translation process, but also cognitive knowledge, logic, a context, ability to abstract concept at a synonym choice are available.

If the translation of the term already exists, it is necessary to choose it no matter what model is used. It is necessary to give the preference to the semantic equivalents, providing the adequate translation of a detail-logic sense of the term. In comparison with a transliteration, the way of translation allows the native speakers of any language to reach understanding of the translated term. In translation of the compound terms it is also necessary to choose elements from Russian and Uzbek, instead of the borrowed bases.

## **Summary on Chapter II**

As we analyzed the stomatology terms, we come to the conclusion that in most cases they are not translated, but are given by the way of transliteration/transcription, because the background of the terms is considered to be brought from Latin. Nevertheless, people around the world understand the Latin terms, which are in common use, and if they do not there are some explanatory dictionaries, which are helpful for descriptive translation, which we used to translate some medical terms into Russian and Uzbek.

Sometimes it is impossible to consider these methods and tools of translation, mentioned in the Chapter II, as the most helpful in translation. If the translator faces the term of which he is not sure in translation, first, it is necessary to check up whether it does not concern the untranslatable group. If it does it is necessary to find out whether there already exists a settled version of this term. It is possible to use the Internet, electronic dictionaries for this purpose, as they are the most updated sources.

Working on the second chapter, we come to a conclusion that while translating the terms of a definite field, the translator is required to know a morphological structure of terms, the semantic features, distinguishing them from common words, the basic types of phrasal terms, their structural peculiarities and specificity of the use to understand and translate the terms correctly.

Translation method is divided into two categories. First category is form-based or literal translation. Secondly, it is meaning based or idiomatic translation.

## **Final conclusion**

The study of terminology in this or that area is a big deal for every good translator. Especially nowadays translators try to do more adequate translation. Of course, every area or sphere of science has its own language and a translator who is new to this or that sphere needs time to get acquainted with the new field of activity and to start doing good translation.

Translation plays an important role in the cultural development of humanity. Thanks to translation people of any country get acquainted with the history, way of life, and scientific achievements of another country. In this case, the role of translators is very important. They are in great demand both oral and written translators, in different spheres of life.

Nowadays we live in a society, where someone's outward appearance and beauty is very significant. Nearly all people in our society try to look like the perfect ideal of beauty, which we all get presented through the media.

In the first chapter we gathered all information, identified and analyzed by scholars, linguists, about translation theory, general information about medical terms.

Having collected the information from the scientific books, internet websites we made the theoretical part of our qualification paper. And this helped us to build the practical part, based on the ways and tools of the translation of stomatology terms.

Thus, having analyzed translation of stomatology terms we finally came to the following outcomes:

So, firstly existing as the narrowly specialized lexicon connected with the medical and stomatology terms and science, for the last decades the lexicon in the sphere of medical and stomatology terms has not only expanded the volume considerably, but also it has begun to emerge actively into the common use.

Progressing processes require the necessity of the adequate translation of texts written in one language corresponding in another. Nowadays the importance of the translation of English stomatology terms into Russian and Uzbek is dictated by the necessity of translation of the literature and items related to the stomatology terms. Difficulty in the translation of stomatology matter consists of many stomatology terms related to the lexicon without any equivalency, but it does not mean the impossibility of their translation. Gradually the stomatology terms get translational conformity, and this process of studying goes on enough dynamically. During the analysis we came to the conclusion it has been established that the methods of translation such as calques, transliteration/transcription, descriptive translation, analogical translation, reception of the semantic development, transformation of the parts of the sentence are applicable for interpretation of stomatology terms.

And no matter what ways are chosen, the main task of a translator is to give the detail-logic sense of the term adequately. Thus it should be unequivocal and the nominative.

As long as Latin has a dominant role in medical sphere, most of stomatology words are rooted in Latin. Of course, there are such words that had an influence the English and Latin languages and became available in everyday spoken language.

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## Appendix

|   |   |   |
|---|---|---|
| <p>The terms <b>Central</b> - The two upper and two lower teeth in the very center of your mouth.</p>               | <p><i>Central</i> atamasi Markaziy og`iz boshlig`idagi tishlarning eng markazida joylashgan ikkita tishning nomini anglatadi.</p> | <p><i>Central</i> означает Центральный -два верхних и два нижних зуба в самом центре вашего рта .</p> |
| <p><b>Wisdom Tooth</b> means the name for the third molar</p>   | <p><i>Wisdom Tooth</i> atamasi aqil tish – uchinchi molyar tishning sinonim tarzda berilgan nomi hisoblanadi.</p>                 | <p><i>Wisdom Tooth</i> - означает Зуб мудрости другое название для третьего моляра</p>                |
| <p><b>Anterior Teeth</b> - Your centrals, laterals, and cuspids. These are the teeth in the front of your mouth</p> | <p>Old qisimdagi tishlar – markaziy tish, ya`ni og`iz bo`shlig`ining oldingi qismida joylashgan</p>                               | <p>Передних зубов - Ваши центральные , отводы и клыки . Это зубы в передней части рта</p>             |
| <p><b>Posterior Teeth</b> - Your bicuspid and molars. These are the teeth in the back of your mouth</p>             | <p>Chaynov tishlar – og`iz bo`shlig`ining orqa qismida joylashgan, primolyar tishlar</p>  | <p>Жевательных зубов - ваши премолярами и коренные зубы . Это зубы в задней части рта</p>             |

|   |  |   |
|---|--|---|
| <p><b>Deciduous Teeth</b> - Your primary, or "baby teeth"</p>   | <p>Bargli tishlar – hozirgi asosiy ko`p yillik tishlar yoki «sut tish» lari</p>  | <p>Лиственные Зубы - Ваш основной , или "молочные зубы "</p>  |
| <p><b>Primary teeth</b> - The first set of teeth which come in. Primary teeth are also called "baby teeth" or deciduous teeth.</p>    | <p>Boshlang`ich tishlar – birinchi bor chiqgan tishlar, ya`ni sut tishlari deb ham ataladi.</p>  | <p>Первичные зубы - Первый набор зубов , которые приходят в первичные зубы также называют " молочных зубов " или молочных зубов</p> |
| <p><b>Secondary Teeth-</b> Your permanent teeth, i.e. the second group of teeth to come in.</p>                                       | <p>Doimiy tishlar – bu tishlar sut tishidan so`ng chiqadigan ikkinchi guruh tishlari, doimiy tishlar deb ataladi.</p>  | <p>Вторичные зубы –Ваши зубы вас устраивают , то есть вторая группа зубов, чтобы войти.</p>   |
| <p><b>Quadrants</b> - The four parts of your mouth, that is the upper left, the upper right, the lower left, and the lower right.</p> | <p>Og`iz to`rtligi – bu termen atamasi shuni anglatadiki og`iz bo`shlig`ida joylashgan to`rtta qism ya`ni tepa o`ng jag`, tepa chap jag`, pastki o`ng jag` va pastki chap jag`</p> | <p>Квадрантах– Четыре части вашего рта , то есть верхний левый , верхний правый , нижний левый и нижний правый</p>                  |

|   |  |   |
|---|--|---|
| <p><b>Numerical notation for teeth</b> -The numerical notation for teeth is an alternate to Palmer's notation. In this notation, the centrals are designated as 1's, the laterals as 2's, the cupids as 3's, the first bicuspid's as 4's, the second bicuspid's as 5's, etc</p> | <p>Tishlarni sanoq sonlar yordamida nomlanishi – yana bunda markaziy tishlarning soni 1-chi, birinchi va ikkinchi molyar tishlar 2-chi va 3-chi deb ataladi, birinchi primolyar tishlar 4-chi va ikkinchi primolyar tishlar 5-chi v.h.k. deb yuritiladi</p>                          | <p>Численное обозначение для зубов - численное обозначение для зубов является альтернативой для обозначения Палмера. В этих обозначениях центральные обозначаются как 1 -х, отводы , как 2 -х, 3-х , как клыков , первый премолярами в 4 -х, двухстворчатого , как 5 -х и т.д</p> |
| <p><b>Universal numerical notation for</b> - The universal numerical notation is an alternative numerical notation for teeth. In this notation, your upper right third molar is designated as tooth №1, and then you number each tooth</p>                                      | <p>Har tomonlama mos tushuvchi nomlanish- har bir sohada uchraydigan nomlanish ya`ni sanoq sonlar yordamida berilishi. Tishlarda ham markaziy tishlar nomi raqamlar yordamida ko`rsatilinadi № 1 dan boshlanadi, undan keyin esa tartib raqami yordamida belgilanib davom etadi.</p> | <p>Универсальный численное обозначение - универсального численного обозначения является альтернативой численное обозначение для зубов . В этих обозначениях ваш верхний правый третий моляр обозначен как зуб №1 , а затем номер каждый зуб</p>                                   |

## GLOSSARY

|                     |   |                             |
|---------------------|---|-----------------------------|
| <b>Crown</b>        | –koronka                                    | –каронка                    |
| <b>Cementum</b>     | –plomba                                     | –корешковая                 |
| <b>Enamel</b>       | –tishning emal qatlam                       | - кора                      |
| <b>Bone</b>         | -Suyak                                      | –эмаль                      |
| <b>Alveolus</b>     | –tish ildizi                                | –кость                      |
| <b>Apex</b>         | –ildizning pastki qismi,<br>yiring qopchasi | –корень зуб<br>нижние часть |
| <b>Buccal</b>       | –lunji                                      | –ротовую                    |
| <b>Cuspal</b>       | –tish do`mboqchalari                        |                             |
| <b>Dentin</b>       | dentin qavati                               | ДЕНТИН                      |
| <b>Frenum</b>       | tilosti tilchasi                            | ПОД ЯЗЫКОМ                  |
| <b>Gingivae</b>     | milk  | десны                       |
| <b>Gums</b>         | milk  | десны                       |
| <b>Pulp</b>         | pulpa qavati                                | слой пульпы                 |
| <b>Pulp chamber</b> | pulpa kamerasi                              | мякоть камера               |
| <b>Pulp kanal</b>   | pulpa kanali                                | мякоть канал                |
| <b>Root</b>         | ildiz                                       | корень                      |
| <b>Abutment</b>     | tayanch tish                                | устой                       |

|                            |                                     |                                     |
|----------------------------|-------------------------------------|-------------------------------------|
| <b>Amalgam</b>             | plomba                              | Пломба                              |
| <b>Antiseptic</b>          | Antiseptika                         | Антисептика                         |
| <b>Anesthetic</b>          | mahalliy narkoz                     | Анестетик                           |
| <b>Anterior</b>            | old tishlar                         | передные зубы<br>(фронтальные зубы) |
| <b>Arch</b>                | primalyar tishlar                   | примолярные зубы                    |
| <b>Articulator</b>         | Artikulyator                        | Артикулятор                         |
| <b>Asepsis</b>             | Aseptika                            | Асептика                            |
| <b>Aspirator</b>           | Aspirator                           | Аспиратор                           |
| <b>Aspiration</b>          | Aspiratsiya                         | Аспирировать                        |
| <b>Bruxism</b>             | bruksizm (tish zirqirashi)          | Бруксизм                            |
| <b>Calculus</b>            | tish toshi                          | зубной налёт                        |
| <b>Caries</b>              | Kares                               | Кариес                              |
| <b>Cavity</b>              | tish yemirilishi                    | Кариес                              |
| <b>Cross contamination</b> | stirillanmagan instrumentlar        | не стерилизованный<br>инструменты   |
| <b>Crown</b>               | Karonka                             | каронка                             |
| <b>Cuspid</b>              | So`yloq tish                        | Клык                                |
| <b>Decalsification</b>     | tishning yemirilishiga<br>moyilligi | Восприимчивый к<br>кариесу          |
| <b>Denture</b>             | protez                              | Протез                              |

|                             |                                |                           |
|-----------------------------|--------------------------------|---------------------------|
| <b>Diagnosis</b>            | Diagnostika                    | Диагностика               |
| <b>Disinfection</b>         | dizenfeksiya                   | дезинфекция               |
| <b>Disposable materials</b> | bir martalik xomashyo          | Одноразовые Материалы     |
| <b>Distal</b>               | tishlar orasidagi b`shliq      | Открытое место по зубам   |
| <b>Edentulous</b>           | tishsizlik prikus yuqligi      | адентии                   |
| <b>Endodontist</b>          | tish doktori                   | стоматолог                |
| <b>Erup, Eruption</b>       | tishning tushishi              | вспыхнуть                 |
| <b>Exfoliate</b>            | tishning tushishi              | отшелушивание             |
| <b>Filtrum</b>              | lab ariqchasi                  | Верхней част над губам    |
| <b>Gingival hypertrophy</b> | milkning o`shishi              | Гингивальная гипертрофия  |
| <b>Gingivitis</b>           | gingivit (milk yallig`lanishi) | гингивит                  |
| <b>Impacted tooth</b>       | tishning tasirchanligi         | воздействие зуба          |
| <b>Implant</b>              | inplantat tish                 | имплантат                 |
| <b>Interproximal</b>        | tishlarning ochilib qolishi    | пространство между зубами |
| <b>Intraoral</b>            | og`iz bo`shlig`i               | внутри ротовой            |
| <b>Irrigation</b>           | og`izni yuvish                 | промывание рта            |
| <b>Labial</b>               | o`g`ri tish                    | половые зубы              |
| <b>Lingual</b>              | O`g`ri tish                    | половой зуб               |

|                            |   |  |
|----------------------------|---|--|
| <b>Mandible</b>            | pastki jag`   | нижняя челюсть   |
| <b>Mandibular</b>          | pastki jag` ga tegishli   | имеющий отношение к<br>вашей нижней челюсти  |
| <b>Masticate</b>           | kavshanmoq  | месить   |
| <b>Maxilla</b>             | yuqori jag`   | верхняя челюсть  |
| <b>Maxillary</b>           | yuqori jag` ga tegishli   | имеющий отношение к<br>вашему верхней челюсти  |
| <b>Mesial</b>              | markaz  | медиальный   |
| <b>Midline</b>             | tanglayning yumshoq joyi  | самый центр вашего рта   |
| <b>Mixed dentition</b>     | sut va doimiy tishlarning<br>mavjud vaziyati                      | когда обе молочные и<br>постоянные зубы<br>присутствуют                              |
| <b>Occlusal</b>            | oklyuziya (prikus turi)   | окклюзионный (тип<br>прикуса)  |
| <b>Occlusal plane</b>      | tepa jag` tishlarning oldinga<br>o`shishi                         | воображаемая<br>поверхность  |
| <b>Occlusal radiograph</b> | oklyusion rengen  | окклюзионная<br>рентгенограмма   |
| <b>Oral</b>                | talafuz nuqtasi   | относящихся к устью  |
| <b>Osteoblasts</b>         | osteoblast (tishlarning<br>o`shishida yordam beruvchi<br>hujayra) | остеобластов (Клетки,<br>которые способствуют<br>росту и и<br>зубов).развитию костей |

|                       |  |   |
|-----------------------|--|---|
| <b>Osteoclasts</b>    | osteoklastlar (suyakda g`ovak hosil qiluvchi hujayralar) | остеокластов (клетки, которые помогают создать гнезда в костях) |
| <b>Pathogens</b>      | patogenlar   | патогены  |
| <b>Pathology</b>      | patalogiya (kasalliglarni o`rganuvchi soha)              | паталогия (изучение аномальных больных)                         |
| <b>Pedodontist</b>    | bolalar tish shifokori                                   | детский зубной врач   |
| <b>Periodontist</b>   | stomatolog (milk mutaxasisi)                             | стоматолог (специалист по десен.                                |
| <b>Plaque</b>         | kareys chaqiruvchi bakteriya                             | бактерия которая вызывает кареис                                |
| <b>Periodontal</b>    | milk kasalligi   | заболевание десен   |
| <b>Posterior</b>      | og`izning orqa qismi                                     | относящихся к задней части рта                                  |
| <b>Prophylaxis</b>    | tishni tozalomoq   | чистка зубов  |
| <b>Prosthodontist</b> | sun`iy tishlar bn ishlovchi mutaxasis shifokor           | специализируется на искусственных зубами                        |
| <b>Proximal</b>       | tishlar orasidagi masofa                                 | пространство между соседними зубами                             |
| <b>Radiograph</b>     | rengen   | рентген   |
| <b>Root canal</b>     | tishning nerv kanali                                     | канал нерва   |
| <b>Sagittal plane</b> | jag`ning ochilib qolishi (sagital prikus)                | сагитал прикус  |

| <b>Sanitization</b> | sanitariya jarayoni | обеззараживание |
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