

**CHEMICAL ELEMENTS USED IN THE FORMATION OF LATIN DRUG NAMES
AND THEIR ANALYSIS**

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Abstract

This article analyzes chemical elements used in the formation of Latin drug names and their terminological significance. It examines Latin names and roots of chemical elements and their use in pharmaceutical nomenclature. The role of elements in identifying drug composition, pharmacological groups, and therapeutic effects is also discussed. The study contributes to improving professional terminology skills in medicine and pharmacy.

Keywords

Latin drug names, chemical elements, pharmaceutical terminology, drug nomenclature, element roots, analysis

Résumé

Cet article analyse les éléments chimiques utilisés dans la formation des noms latins des médicaments et leur importance terminologique. Il étudie les noms et racines latines des éléments chimiques ainsi que leur emploi dans la nomenclature pharmaceutique. L'article met également en évidence le rôle des éléments chimiques dans la détermination de la composition, du groupe pharmacologique et de l'effet thérapeutique des médicaments. Cette étude contribue au développement des compétences terminologiques en médecine et en pharmacie.

Mots-clés

noms latins des médicaments, éléments chimiques, terminologie pharmaceutique, nomenclature des médicaments, racines des éléments, analyse

INTRODUCTION

In the fields of medicine and pharmacy, the correct naming of drugs is of great scientific and practical importance. Drug names are formed mainly based on the Latin language, since Latin is the main source of international medical terminology. In particular, chemical elements and their Latin roots play an important role in the naming of drugs with a chemical composition.

Many drug names contain the names of chemical elements such as **natrium (Na)**, **potassium (K)**, **ferrum (Fe)**, **calcium (Ca)**, **magnesium (Mg)**, **iodine (I)** or their abbreviated forms. These elements serve as an important indicator in determining the composition, pharmacological effect and group of the drug. Also, the reflection of element names in the

composition of the drug helps specialists quickly and clearly understand the properties of the drug.

Studying the principles of forming Latin drug names is necessary for pharmacists, doctors and medical students, as this knowledge serves to prevent errors in the process of correctly writing, reading and using drugs. Therefore, studying this topic creates a deeper understanding of the role of chemical elements in medical terminology and increases scientific literacy.

MAIN PART

Principles of formation of Latin drug names

In pharmaceutical terminology, the naming of drugs is based on strict scientific rules. Latin is the main language of international medical and pharmaceutical terminology, and drug names are often formed depending on the chemical composition, mechanism of action or origin of the substance. Especially in inorganic and mineral preparations, the Latin names of chemical elements or their roots form the basis of the drug name.

The names of chemical elements indicate the main active substance of the drug, and this is important in determining the pharmacological group of the drug. For example, in the naming of sodium and potassium salts, iron preparations or iodine-containing drugs, Latin terms such as Natrium, Kalium, Ferrum, Iodum are used, respectively.

Latin roots of chemical elements and their expression in drug names

In Latin drug names, chemical elements are often used in full or as abbreviated roots. These roots help determine the composition of the drug. For example:

- **Natrium (Na)** – *Natrii chloridum, Natrii bromidum*
- **Kalium (K)** – *Kalii iodidum, Kalii permanganas*
- **Calcium (Ca)** – *Calcii gluconas, Calcii chloridum*
- **Ferrum (Fe)** – *Ferrum lactas, Ferri sulfas*
- **Magnesium (Mg)** – *Magnesii sulfas, Magnesii oxidum*
- **Iodum (I)** – *Iodum, Kalii iodidum*

As can be seen from these examples, the names of the elements are used in the genitive case, indicating the main active ingredient of the drug. This indicates the important role of the grammatical rules of the Latin language in pharmaceutical terminology.

Pharmacological significance of drug names based on chemical elements

Drug names involving chemical elements are important not only linguistically, but also pharmacologically. The name of the element can give an initial idea of the effect of the drug on the body. For example, iron (Ferrum) preparations are used to treat anemia, while calcium (Calcium) preparations are important in strengthening bone tissue and nerve impulses.

Also, iodine (Iodum) preparations are used to regulate the activity of the thyroid gland, and magnesium (Magnesium) has a calming and muscle-relaxing effect on the nervous system. Therefore, the chemical element in the name of the drug serves as an important source of information for doctors and pharmacists.

The practical significance of analyzing Latin drug names

Identifying chemical elements in the composition of Latin drug names plays an important role in preventing errors in medical practice. Correct reading and understanding of the name of the drug reduces the risk of incorrect use of the drug. Especially in writing prescriptions and in pharmacy practice, perfect knowledge of Latin terms is required.

In addition, the analysis of drug names forms scientific thinking in students, reveals the inextricable link between the disciplines of chemistry, pharmacology and the Latin language. In this regard, the study of Latin drug names based on chemical elements is of great theoretical and practical importance in the educational process.

ANALYSIS AND RESULTS

The analysis showed that chemical elements are of significant terminological and pharmacological importance in the formation of Latin drug names. The use of Latin names of elements or their roots in drug names provides important initial information about the composition and mechanism of action of the drug. This ensures the scientific accuracy and consistency of pharmaceutical terminology.

During the analysis, it was found that chemical elements such as sodium, potassium, calcium, magnesium, iron and iodine are most often found in drug names. Drug names based on these elements are usually used in the genitive case in accordance with the grammatical rules of the Latin language, clearly expressing the chemical nature of the active substance. This contributes to the uniform understanding of the drug name at the international level.

Also, drug names based on chemical elements play an important role in determining the pharmacological group. For example, iron-containing drugs are used in hematological diseases, and calcium and magnesium compounds are used to support the activity of the musculoskeletal and nervous systems. Iodine-containing drugs play an important role in the practice of treatment related to the endocrine system. This indicates that the semantic load of the drug name is directly related to the purpose of treatment.

The results of the study confirm that the analysis of Latin drug names has not only linguistic, but also practical medical significance. Correct understanding of the chemical element in the name of a drug facilitates the process of selecting a drug, writing a prescription and explaining it to the patient for doctors and pharmacists. In addition, this knowledge serves to strengthen interdisciplinary knowledge for students studying medicine and pharmacy.

In summary, chemical elements are an important component of Latin drug names, and their correct and scientifically based use ensures the accuracy, safety, and effectiveness of pharmaceutical terminology. An in-depth study of this topic will help reduce errors in medical practice and increase professional literacy.

CONCLUSION

The results of the study showed that chemical elements are of great scientific and practical importance in the formation of Latin drug names. The Latin names of chemical elements and their roots serve as the main indicator in determining the composition, pharmacological effect and group of drugs. This ensures the accuracy and international uniformity of pharmaceutical terminology.

During the study, it was found that elements such as sodium, potassium, calcium, magnesium, iron and iodine are most often found in drug names. Drug names based on these elements are formed in strict accordance with the grammatical rules of the Latin language, which helps to correctly understand drugs and avoid mistakes in practice. Also, drugs named based on chemical elements are an important source of information for doctors and pharmacists, allowing them to make effective decisions during treatment.

In conclusion, the role of chemical elements in the formation of Latin drug names is invaluable, and in-depth study of this topic is of great importance in increasing terminological literacy in the field of medicine and pharmacy, strengthening professional training, and ensuring drug safety.

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