

## JĘZYKOZNAWSTWO I GLOTTODYDAKTYKA

**Eugeniusz Józef Kucharz**

Katedra i Klinika Chorób Wewnętrznych i Reumatologii

Śląski Uniwersytet Medyczny w Katowicach

### ANGLICISMS IN MEDICAL LATIN AS USED BY POLISH PHYSICIANS: A RARE CASE OF INFLUENCE OF MODERN ENGLISH ON THE DEAD LANGUAGE

**Key words:** medical terminology, Anglicisms, medical Latin, Polish physicians

#### 1. Introduction

One of the most common linguistic phenomena is the occurrence of different forms of influence of one language upon another. It almost always refers to living languages that are still in their natural development or at least language which is influenced is a living one [Winford 2002, 25]. The present paper is designed to describe a unique phenomenon, a significant effect of modern English upon a dead language, Latin, occurring at the turn of the 20th century. The aim of this short study is also to focus attention on this phenomenon especially because sources for its investigations are disappearing very quickly.

Latin lost its role as a national language with demise of the Roman Empire, however, it was still a common language of the Roman Catholic Church, European politics and all forms of academic activity. Since the end of the Renaissance and a concomitant increase in the role of national languages, Latin was no more used for interpersonal communication either in academic circles or in international relations [Jonson 2004, 17]. Latin has been a totally dead language for at least two centuries when it disappeared as the language of university instruction of medicine and theology, the last two professional fields which were taught in Latin at European universities. Despite removing Latin from academic instruction in the first half of the 19th century, the language was used in European medicine for description of diagnoses and

medical procedures [Mamzer 1986, 39, 422-425]. For this purpose Latin was widely used until the second half of the 20th century. In the 1960s and 1970s, the majority of European countries replaced Latin by national languages in all forms of medical records. Poland was the only country where Latin was still obligatory for that purpose. The employment of Polish for description of medical diagnoses was allowed as late as in June 2007<sup>1</sup>. Within two or three following years, all Latin descriptions were substituted by Polish ones, and since then, only Polish has been used for all forms of medical records.

A number of factors affected the correctness and linguistic forms of the Latin language that was used for medical purposes in Poland. Changes in a secondary school curriculum eliminated Latin as a subject of comprehensive education in the early 1950s. It resulted in a drop of the knowledge of Latin in subsequent generations of secondary school graduates. Instruction of Latin that was provided to medical students was very limited and oriented on the acquisition of anatomical terminology and some disease description only [Szela 1984, 37, 1145-1147]. The mentioned changes resulted in a sharp decrease in the knowledge of Latin in Polish medical circles [Białowąs 1970, 23, 867-868; Białowąs 1975, 28, 60-61; Waszyński 1981, 52, 665-667]. This occurred in a period of a rapid development of clinical medicine. New discoveries within that field were published in English that became after the Second World War *lingua franca* of medical sciences similarly as for many other fields [Kucharz 2015, 68, 413-416; Olesiński 1974, 46, 795-797].

The phenomena discussed above resulted in a significant discrepancy between needs to describe medical diagnoses and procedures in Latin and the ability to do it by an average Polish physician. Despite difficulties, all physicians were obligated to do it in their everyday clinical practice. Medical records of the last decades of the 20th century and the first decade of the next century abound in examples of words, phrases or sentences coined in Latin and in almost all cases derived from English. The majority of these new linguistic forms were incorrect [Łukasik 1977a, 32, 33-36; Łukasik 1977b, 32, 77-79; Traunfellner 1957, 12, 370-371]. An extensive introduction of Anglicisms into Latin was a unique linguistic phenomenon.

The problem of the influence of English on Latin used for medical records in Poland in recent years has not been investigated at all. The only paper referring to this problem is a paper by Łukasik [1976b, 31, 2243-2245]. Łukasik was an admirer and supporter of Latin and its usage in medicine [Łukasik 1976a, 31, 2035-2037]. He published the paper in which he rued numerous errors in Latin appearing in medical records or medical publications which resulted from the influence of English on medical Latin.

---

<sup>1</sup> Decree of the Minister of Health of the Republic of Poland on medical records (21 December 2006, came into effect on 21 June 2007).

Obviously, the main source for studies on Anglicisms in medical Latin remains medical records. According to the Polish law, medical records are kept in archives for ten years only. It means that currently hospitals and out-patient clinics have been keeping records since 2005-2006. As was described earlier, Latin was removed from medical records in Poland in 2007, thus within two years almost all records containing descriptions in Latin will be destroyed. The opportunity to build any corpus of these unique Latin terms or phrases will disappear. Moreover, an electronic storage of medical records was introduced widely only in last few years in Polish medical institutions, and almost all records retrieved in an electronic form contain descriptions in the Polish language only.

## 2. Classification of Anglicisms in medical Latin

The aim of the study was to analyze the effect of English on Latin used for medical purposes on the basis of records available in one of the hospitals in the Silesian region. The medical records dated 2002-2006 were investigated. The study analyzed only those forms of influence of English upon Latin which were believed to have occurred in the last two – four decades. The majority of them applied referred to medical discoveries or inventions that were introduced into clinical practice after 1980.

Based on the analysis of about 250 medical records of in-patients (a complete set of records referring to one hospitalization was considered as one medical record in every case) six classes of Anglicisms in medical Latin were distinguished as summarized in Table 1.

**Table 1**

Classification of Anglicisms in medical Latin

Class	Description
1	Usage of Latin words of direct English origin when Latin medical terminology has no proper Latin equivalents
2	Incorrect usage of newly-coined Anglicisms of terms that have proper Latin equivalents
3	Phrases or sentences with mixed usage of Latin and English words
4	Application of English word order in Latin phrases or sentences (syntactic calques)
5	Semantic or phraseological calques
6	Application of English spelling for Latin words

Further details of the proposed classification of forms of influence of English on Latin can be found in subsequent examples.

### 2.1. English terms without Latin equivalents

Progress in medicine is associated with creation of new terms in English. In the 20th century, this natural process was followed by the coining of new Latin medical terms which were equivalents for new developed English specialized terminology. From the linguistic point of view, this process was relatively simple because the majority of new English medical terms like almost all medical terminology were based on Greek and Latin terms [Bandurski 1983, 38, 261-262]. Thus, it was a process of a “reverse” formation of new Latin terms that were primarily of Latin (and Greek) origin but the need to coin these new words resulted from a need to find Latin equivalents for English medical terms. Greek terms ἀπο (apo) and πτωσις (ptosis) (literally describing falling down of leaves in autumn or debris formed by the leaves) were adopted in English as apoptosis (or apoptose) to describe non-necrotic natural death of cells, so-called programmed cell death, and subsequently the Latin term “apoptosis” was coined [André 2003, 361, 1306].

Difficulties occurred when an English medical term was not based on Greek and Latin terminology. Such terms were Latinized and were classified as class one of the proposed categorization (Table 1). There are few such terms including “block”, “shock”, “arrest”, and “stress”. In the analyzed medical records the terms were used in Latin descriptions of diagnoses usually as incorrectly coined words, i.e. “blocus”, “shocus”, “arrestus” and “stressus”. In some records, they were used exactly as they are in English, and such an effect of English on medical Latin should be classified as class three of the proposed categorization (Table 1).

The following diagnoses are examples of the Latinization of English terms described above:

- *Blocus completes atrioventricularis* (complete atrioventricular block, i.e. lack of electric conductivity within the cardiac conduction system between the atria and ventricles), Łukasik [Łukasik 1976b, 31, 2243-2245] suggested the Latin term “dissociation” as a proper equivalent of the English term “block” but the meaning of the Latin term “dissociation” is slightly different from the English word “block”. According to Plezi [Plezi 2007, vol. 2, 208] “dissociation” in Latin means: separation or mutual repulsion. Apart from “dissociation” Dąbrowska [Dąbrowska 1990, 39] proposed also “perturbation conductivitas” or “impeditio conductivitas”. Both terms refer to impaired conduction.
- *Shocus posthaemorrhagicus* (shock occurring after extensive bleeding). The term “shock” describes a systemic body reaction to severe harmful factors, and has no Latin equivalent. The dictionary completed by Dąbrowska [Dąbrowska 1990, 813] proposed the term “commotus” to the described shock.

Szela and Białowaś [Szela and Białowaś 1986, 39, 856] suggested the term “succussus” as the Latin equivalent of the term shock.

- *Arrestus cardialis* (cardiac arrest). The term “arrestus” does not exist in Latin, and was used to describe a morbid state resulting from stoppage of hemodynamic function of the heart. A Latin term “*pausa cardiaca*” was suggested as a proper equivalent to describe this medical condition [Szela and Białowaś 1986, 39, 855-858].

The term “stress” is in fact of Latin origin. It came to English from Old French “*estresse*” (oppression). Latin “*strictus*” means drawn tight. The primary English meaning of the word “stress” is force extension on the person for the purpose of compulsion. There is no Latin term “*stress*” or “*stressus*” and such forms are incorrect Anglicisms. The term “stress” does not occur in the dictionary completed by Dąbrowska [Dąbrowska 1990].

The Latin term “*syndrome dumping*” belongs to the same class. It is an incorrect term coined on the basis of the English term “dumping syndrome”. Dumping syndrome occurs in patients after a surgical removal of a part of their stomach. The syndrome occurs when the undigested content of the surgically altered stomach moves too rapidly to the duodenum. The English term originates from the verb “to dump” with the meaning “to dispose of”, “to throw out” or to “to empty”. There are some suggested terms that may be equivalents of the term “dumping syndrome” in Latin as *syndrome*<sup>2</sup> *minoris ventriculi*, *syndrome microgastritis* [Szela and Białowaś 1986, 39, 855-858].

## 2.2. Anglicisms used for terms that have Latin equivalents

Examples representing class two of the proposed classification of the forms of influence of English on Latin that were found in medical records were caused by an insufficient knowledge of newly-coined Latin medical terms and the formation of self-coined terms (based on English terminology) for terms that have their Latin equivalents. Such a phenomenon was found in the following description of medical diagnosis:

- *Status post implantationis pace-makeri* (condition after the implantation of a pace-maker). The term “pace-maker” was adopted (and declined) from English despite the proper but rather unknown, Latin term “*stimulator artificialis*”.

A common error in medical Latin is the usage of an English-derived term “*sodium*” instead of the proper, known for years, Latin “*natrium*”. The already

<sup>2</sup> There is a controversy concerning the Latin translation of the term “syndrome”. Dictionary edited by Dąbrowska [Dąbrowska 1990, 858] provides the term “*syndrome*, -es (feminum)” as the only correct form. The same opinion was presented by Łukasik [1977a, 34] while the paper of Szela and Białowaś [Szela and Białowaś 1986, 855] suggested “*syndrome*, -matis (neutrum)” as the correct form of the noun.

mentioned term “shock” is also used as “*electroshocus*” to describe a morbid state caused by an exposure of a human being to electric current of high voltage. The Latin equivalent is “*electroplegia*” (literally: paralysis caused by electric current).

### 2.3. Mixed usage of Latin and English

Class 3 of the classification (Table 1) is a common form of influence of English on medical Latin. Phrases with mixed Latin and English words were shown to be used in description when the author was able to write in Latin only part of the phrase or writing it in Latin was associated with a usage of different linguistic structure than that in English. This can be exemplified by:

- *Status post implantationis drug-releasing stent*
- *Anastomosis end-to-end*
- *Insuficiencia renum cum salt losing syndrome*
- *Cachexia majoris gradus e malabsorption syndrome*

Most of mixed usage of Latin and English were diagnosis of complex disorders or syndromes. They consisted of a part that had a well-known form in Latin and an English part that usually described novel medical phenomenon. The last one had no Latin equivalent or this equivalent was rather unknown by Polish physicians. The term “status post implantations” was used to describe the state after implantation. The term “drug-releasing stent” is rather new one and referred to a recently invented device in a form of expandable tube that is inserted into lumen of the artery in order to keep it open. The drug-released stent combined the properties of dilating device with a long-term release of anticlotting agent that prevent the vessel from obstruction from blood clot. The same form is found in other examples. Latin term “anastomosis” was supplemented with a more precise description “end-to-end” that specified the form of surgical procedure of formation of the anastomosis. The last two examples consist of a basic Latin diagnostic phrase (“renal failure with” and “advanced cachexia”, respectively) supplemented with English terms “salt-losing syndrome” and “malabsorption syndrome”. Both of them specified the diagnosis provided in general Latin term.

### 2.4. Synthactic calques

Class 4 includes the usage in Latin of the word order typical of English. The effect of English on medical Latin is illustrated by the following examples:

- *Localis intravascular coagulationis syndrome* (localized intravascular coagulation syndrome), a correct Latin name is: *syndrome coagulationis intravasculari localis*

– *Distale radii fracture* (distal radius fracture) a correct Latin name: *fractura radii pars distalis* or more precise: *fractura radii loco typico*

The word order is relatively well established in majority of Latin phrases especially used for description of medical diagnosis, and is different from English equivalents. The old terms were commonly provided in a correct Latin form (only rare mistakes) while relatively newly coined phrases (e.g. localized intravascular coagulation syndrome) were written in Latin with English word order in majority of medical records.

### 2.5. Semantic calques

The following example of phraseological calque was found in literature: *syndrome arteriae subclaviae furacis* [Łukasik 1976b, 31, 2243-2245]. It is a calque of the English term: “Subclavian steal syndrome”. The English term described a disease caused by a redirection of blood flow to the subclavian artery resulting in an insufficient blood supply in other vessels. The Latin calque has literally meaning “a syndrome of the subclavian artery which is stilling” or “artery of a thief”. The term is accepted, but may sound slightly funny.

### 2.6. Application of English spelling for Latin words

A number of spelling errors occurred in medical Latin that resembled spelling of English medical terms, especially American English terminology. The examples are as the following:

- *exudativum* (English: exudative), the correct Latin form: *exsudativum*
- *hemorrhagia* (English: hemorrhage), the correct Latin form: *haemorrhagia*
- *thyroid glandulae* (English: thyroid gland), the correct Latin form: *glandulae thyroideae*
- *coronarographia* (English: coronarography), the correct Latin form: *coronariorographia*
- *adhesiones* (English: adhesiones), the correct Latin form: *adhaesiones*.

It should be mentioned that a number of English medical terms have different spelling in British and American English. For example, the term “hemoglobin” (American spelling) has British spelling “haemoglobin”. Thus, it should be distinguished clearly incorrect spelling (e.g. Latin *thyroid glandulae* instead of *glandulae thyroidea*) from words that apply American English spelling that is incorrect when British spelling is considered (e.g. Latin *haematoma*, British English *haematoma*, American English *hematoma*).

### 3. Commentary and conclusions

The analysis of Anglicisms in Latin used for medical records suggests two major factors responsible for a relatively significant influence of English on Latin terminology and linguistic structures. The first factor is an insufficient knowledge of medical Latin among the Polish physicians. The lack of knowledge is not only responsible for erroneous terms but also for the substitution of parts of phrases with English or English-like forms [Bujak 1969, 24, 1549-1551; Łukasik 1976a, 31, 2035-2037]. Reading of medical records may suggest that most of Polish physicians knew a limited number of diagnostic descriptions in Latin but less common, more modern or simply atypical phrases were composed with the help of the English language. This suggestion indirectly supports a broad at least passive knowledge of English medical terms. The second factor that is believed to be responsible for a common usage of English-derived terms in Latin phrases is striving for explicitness and easy understanding of the medical diagnoses. The application of a linguistically wrong term “pace-makeri” in the Latin phrase was definitely better recognized than a proper Latin equivalent of the term, “stimulatori artificialis”. The same apply to use in Latin of English word order or calques.

All these facts indirectly indicate that the application of a dead language even with updated specific terminology does not fulfil the requirements of unlimited and complete communication. Further studies are needed to elucidate more details and mechanisms associated with the occurrence of Anglicisms in medical Latin at the turn of the 20th and 21st centuries.

### Bibliography

- André Nicolas. 2003. *Hippocrates of Cos and apoptosis*. “Lancet” vol. 361: 1306.
- Bandurski Albin. 1983. *Uwagi na temat mianownictwa grecko-łacińskiego*. „Polski Tygodnik Lekarski” t. 38: 261-262.
- Białowąs Mikołaj. 1970. *Uwagi w sprawie łacińskiej terminologii lekarskiej*. „Wiadomości Lekarskie” t. 23: 867-868.
- Białowąs Mikołaj. 1975. *Przyczynek do hamartologii łacińskiej w pracach medycznych*. „Wiadomości Lekarskie” t. 28: 60-61.
- Bujak Władysław. 1969. *Nasza „łacina”*. „Polski Tygodnik Lekarski” t. 24: 1549-1551.
- Dąbrowska Barbara. 1990. *Słownik medyczny polsko-łaciński*. Warszawa: Państwowy Zakład Wydawnictw Lekarskich.
- Jonson Tore. 2004. *A Natural History of Latin*. Oxford: Oxford University Press.
- Kucharz Eugeniusz Józef. 2015. *Medical terminology: its size and typology*. „Wiadomości Lekarskie” t. 68:413-416.
- Łukasik Seweryn. 1976a. *O potrzebie kultywowania mianownictwa łacińskiego w diagnostyce lekarskiej*. „Polski Tygodnik Lekarski” t. 31: 2035-2037.
- Łukasik Seweryn. 1976b. *„Pace-maker”, „czynniki ryzyka” i inne anglicyzmy w polskim mianownictwie lekarskim*. „Polski Tygodnik Lekarski” t. 31: 2243-2245.



- Łukasik Seweryn. 1977a. *Najczęstsze błędy w łacińskim mianownictwie diagnostycznym*. „Polski Tygodnik Lekarski” t. 32: 33-36.
- Łukasik Seweryn. 1977b. *O poprawność językową w polskim mianownictwie lekarskim. Próba nakreślenia programu działania*. „Polski Tygodnik Lekarski” t. 32: 77-79.
- Mamzer Stanisław. 1986. *Łacińskie mianownictwo kliniczne i jego rola we współczesnej medycynie*. „Wiadomości Lekarskie” t. 39: 422-425.
- Olesiński Władysław. 1974. *Uwagi o mianownictwie medycznym: Łacina i angielski – język medyczny*. „Polski Przegląd Chirurgiczny” t. 46: 795-797.
- Plezi Marian. 2007. *Słownik łacińsko-polski*. Warszawa: Wydawnictwo Naukowe PWN, vol. 1-5.
- Szela Stefan. 1984. *O potrzebie nauczania łaciny medycznej*. „Wiadomości Lekarskie” t. 37: 1145-1147.
- Szela Stefan, Białowas Mikołaj. 1986. *W sprawie niektórych określeń łacińskich w medycynie wewnętrznej*. „Wiadomości Lekarskie” t. 39: 855-858.
- Traunfellner Zdzisław. 1957. *W sprawie łaciny lekarskiej*. „Polski Tygodnik Lekarski” t. 12: 370-371.
- Waszyński Edmund. 1981. *W trosce o kulturę języka łacińskiego w położnictwie i ginekologii*. „Ginekologia Polska” t. 52: 665-667.
- Winford Donald. 2002. *An Introduction to Contact Linguistics*. Hoboken, New Jersey: Wiley Blackwell.

### Summary

#### ANGLICISMS IN MEDICAL LATIN AS USED BY POLISH PHYSICIANS: A RARE CASE OF INFLUENCE OF MODERN ENGLISH ON THE DEAD LANGUAGE

The study was designed to describe and classify Anglicisms in modern medical Latin used for description of medical diagnosis and procedures in medical records. Obligatory use of Latin for that purpose in Poland until 2007 resulted in formation of a number of the English-derived medical terms. On the base of analysis of 250 medical records, Anglicisms were classified into six classes [(1) English terms that have no Latin equivalents; (2) English terms that are commonly used in Latin also they have proper Latin equivalents; (3) mixed English-Latin phrases; (4) syntactic calques; (5) semantic or phraseological calques; (6) English spelling of Latin words]. Mechanisms of development of Anglicisms were discussed. Anglicisms in Latin represent a unique phenomenon, the effect of modern English on the dead language.

Kontakt z Autorem:  
ejkucharz@poczta.onet.pl