

Article

Morphology of Medical Pathological Terms with The Prefix (Cardio)

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Abstract:

Medical terminology plays a crucial role in the understanding and communication within the medical field. Rooted in ancient languages such as Greek and Latin, medical terms consist of various components including prefixes, suffixes, and combining vowels. However, identifying the root of word formation within medical terms is essential for comprehensive comprehension. This research aims to address this by focusing on the prefix "cardio" and its associated medical pathological terms. Through systematic analysis, a list of medical pathological terms with the prefix "cardio" and their meanings was compiled. The study reveals the significance of understanding the roots of medical terms, highlighting their relevance in both medical education and practice. This research contributes to bridging the knowledge gap in medical terminology, emphasizing its importance in the medical and educational realms.

Keywords: Medical terminology, Latin, Greek, Language of Medicine

1. Introduction

Medical terminology is a language of compound words matched together to define and condense phrases related to the human body, disease, and conditions. Prefixes are a common part of the English language, and therefore already familiar to use. They function much the same way in medical terminology. Word roots and/or combining forms are the base foundation for the medical term and prefixes are word parts that attach to the beginning of a combining form or word root to enhance or modify its meaning. Prefixes tend to act like an adjective. Often, they indicate size or quantity, position, measurement, direction or location, time, or the presence or quality of a specific factor that influences the meaning of the word. [1][2][3]

Medical language is the language used by medical experts in their professional communication and incorporates more than 2,500 years of development influenced mostly by Greek and Latin medical traditions. Long before English became the lingua franca of science, Greek and Latin shaped the conventions of scientific, primarily medical writings for over 2,000 years. [4][5]

Most medical terms have a word root, which gives the essential meaning to the word. For example, cardio- is a root word meaning "heart."

Cardio from Greek. Cardio may refer to the heart cardiology Cardiovascular system.

Here we talk about only heart disease using the prefix cardio and how to give us another meaning.

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2. Materials and Methods

Design of the Study

The descriptive study was conducted to identify and analyze the terms associated with the prefix (cardio) to clarify the linguistic structure of these terms .

1. The setting of the Study
2. The study was carried out at the University of Basrah - College of Nursing.
3. The study continued from October 6, 2022, to October 15, 2023.
4. Criteria of Inclusion the medical terms
5. Medical Pathological Terms with the Prefix (cardio)
6. Information collecting Means
7. Medical references
8. Medical terminology
9. An Introductory English Grammar

3. Results and Discussion

Table (1) Morphology of Medical Pathological Terms [6][7]

Word	Prefix	Root	Suffix
Cardio-acceleration	Cardio	accelerate	Tion
Cardio-auditory	Cardio	Audit	Ory
Cardio-autonomic	Cardio	Auto	nomnic
Cardio-ballistic	Cardio	Ball	istic
Cardio-blast	Cardio	Blast	----
Cardio-cerebral	Cardio	Cere	bral
Cardio-cytological	Cardio	Cytology	Cal
Cardio-cytotoxic	Cardio	Cyto	toxic
Cardio-cytotoxicity	Cardio	cytotoxic	ity
Cardio-deceleration	Cardio	Decelerate	tion
Cardio-degenerative	Cardio	Decelerate	Tive
Cardio-depressant	Cardio	Depress	ant
Cardio-depression	Cardio	Depress	ion
Cardio-depressive	Cardio	depressive	ive
Cardio-embolism	Cardio	Emboli	sm
Cardio-excitatory	Cardio	Excite	Atory
Cardio-gastric	Cardio	Gastric	Tric
Cardio-genetics	Cardio	Genet	Ics
Cardio-genic	Cardio	Gene +	Ic
Cardio-genomics	Cardio	Genomic	S
Cardio-hemic	Cardio	Hem	Ic
Cardio-hypertrophy	Cardio-	Hyper +	trophy
Cardio-inhibition	Cardio	Inhibit	Ion
Cardio-mediastinal	Cardio	Mediastina	L
Cardiomegaly	Cardio	Mega	Ly
Cardio-neurosis	Cardio	Neuros	Is
Cardio-neurotic	Cardio	Neuro +	tic
cardio-oncology	Cardio	Once	Ology
Cardio-pathogenic	Cardio	Pathogen	Ic
Cardio-pathogenesis	Cardio	Pathogen	Esis
Cardio-pathological	Cardio	Pathology	Cal
Cardio-pathology	Cardio	Path	Ology
Cardio-perfusion	Cardio	Perfuse	Sion

Cardio-phobia	Cardio	Phobia	-----
Cardio-phobic	Cardio	Phobic	-----
Cardio-phrenic	Cardio	Phren	Ic
Cardio-physiological	Cardio	Physiology	Cal
Cardio-pulmonology	Cardio	Pulmon	ology
Cardio-puncture	Cardio	Punch	Ture
Cardio-pyloric	Cardio	Pylori	C
Cardio-regenerative	Cardio	Re + genera	Tive
Cardio-renal	Cardio	Re + nal	---
Cardio-sclerosis	Cardio	Sclero	Sis
Cardio-sclerotic	Cardio	Sclerot	Ic
cardio-spasm	Cardio	Spasm	---
Cardio-suppression	Cardio	Suppress	Ion
Cardio-teratogen	Cardio	Terato	Gen
Cardiothoracic	Cardio	Thora	Cic
Cardio-toxic	Cardio	Toxic	----
Cardio-toxicology	Cardio	Toxic	Ology
Cardiotoxicities	Cardio	Toxic	Cities
Cardio-vagal	Cardio	Vagal	-----
Cardio-vasculature	Cardio	Vascular	Ture
Cardio-viral	Cardio	Vital	----
Cardio-virulence	Cardio	Virul	Ence
Cardio-virus	Cardio		Virus

Table1 shows us the prefix cardio and root and some suffixes words for example Cardio virulence cardio is the prefix and virul is the root and ence is the suffix.

+ means these words' prefixes.

As a fresh and senior nursing student, they are very important to learn medical terminology. Learning medical terminology basics will assist you in better knowing and comprehending the material you read for the nursing field.

Table (2) English and Arabic meaning of Medical Pathological Terms[8][9]

Word	English Meaning	Arabic meaning
Cardio accelerator	Quickened heard	مسرع القلب
Cardio-active	Making Effort in heart	مؤثر في القلب
Cardio-anesthesia	Loss of sensation	تخدير القلب
Cardio-angiology		مبحث القلب والأوعية
Cardio-arterial	Arterial and heart	قلبي شرياني
Cardiocele	gap in heart	انفتاق القلب
Cardiocentesis	Jab in heart	وخز القلب
Cardiochalasia	Limpness of the heart	ارتخاء الفؤاد
Cardio cirrhosis	Cirrhosis in heart and liver	ليف كبدي قلبي -تليف الكبد
Cardioclasis	Tear in heart	تمزق القلب
Cardio dilator	Muscle of the heart which dilates	موسع الفؤاد
Cardiodiosis	Increase of heart to	توسيع النهاية القلبية للمعدة

	stomach	
Cardiodynia	Pain in heart	وجع القلب
Cardiogenic shock	Heart attack	صدمة قلبية
Cardiogram	Electrocardiogram	مخطط قلبي
Negative cardiogram	Negative Electrocardiogram	مخطط قلبي سلبي
Vector cardiogram	An arrow indicating its direction	مخطط القلب الاتجاهي
Cardio graphic	All related cardiogram	مايتعلق بتخطيط القلب
Cardioid	Equivalent	نظير القلب
Cardio hepatic	Liver and heart	قلبي كبدي
Cardio-hypertrophy	abnormal enlargement of the heart muscle (myocardial)	تضخم في عضلة القلب
Cardio-inhibitory	Reduce heartbeat	يضعف قوة نبضات القلب
Cardiolith	Pebble or stone of heart	حصاة القلب
Cardiolysin	Case of heart	حالة القلب
Cardio lysis	Release heart from adhere round tissue	تحرير القلب من الالتصاقات بما حوله من أنسجة
Cardio malacia	Abnormal softening of heart muscle	تلين مرضي في عضلة القلب
Cardio megalia	Swell in heart	تضخم القلب
Cardiomegaly	Swelling heart	تضخم القلب
Cardio melanosis	Caused by increased melanin	قتامية القلب
Cardio mentopexy	Fixing heart	تثبيت ثربي قلبي عبر الحجاب الحاجز
Cardio meter	Estimate size and power of heartbeat	تقدير قوة القلب او حجم النبضة
Cardio motility	Capacity to move	حركة القلب
Cardio-myotomy	A surgical procedure in heart	شق الفؤاد
Cardio-nector	Organized heartbeat	منظم دقات القلب
Cardio omentopexy	A surgical procedure in heart muscle	تثبيت جزء من الثرب في عضلة القلب
Cardio-palmus	Heart throbbled	خفقان القلب –رجفة في القلب
Cardio-path	Heart disease	عليل قلبي
Cardio-pathic	Disorder heart	اضطراب قلبي
Cardio-pathy	Cardiovascular disease	داء قلبي
Cardio-pericardiopexy	Fixing heart by pericarditis	تثبيت قلبي بالتأمور
Cardio-pericarditis	Inflammation of the heart	التهاب قلبي
Cardio-phobia	Fear of heart disease	خوف من امراض القلب
Cardio phone	Heart sound	مرسام صوتي للقلب يستخدم لتسجيل نبضات قلب الجنين
Cardio-legia	Loss of the heart function	شلل قلبي
Cardio-ptosis	Prolapse of the heart	رهل القلب
Cardiopulmonary by pass	Transference a surgical cardiopulmonary to do during the surgery	تحويلة قلبية رئوية بواسطة مكنة قلبية رئوية تعمل اثناء توقف القلب خلال عملية جراحية

Cardio pulmonary resuscitation	CPR .combine rescue breathing and chest	انعاش قلبي رئوي
Cardio-rrheuma	A heart Rheumatism	روماتزم قلب
Cardio-rrhexis	Tearing the heart	تمزق القلب
Cardio-sclerosis	Hardind of the heart	تصلب قلب
Cardio-spasm	Contraction of a valve of the heart	شنج صمام الفؤاد
Cardio-surgery	Operation	جراحة القلب
Cardio-thyrotoxicosis	Impairment	اعتلال قلب
Cardio-valvulitis	Inflammation of a valve	التهاب صمام القلب
Cardioversion	Medical procedure by which an abnormal fast heart rate	وقف الرجفان الارتعاشي
Cardioverter	Medical procedure by which an abnormal fast heart rate	مقوم نظم القلب
Cardio-valvulotomy	A procedure used in heart valve surgery	شق او بضع الصمام القلبي التاجي

4. Conclusion

Students in medical programs face a notable challenge when encountering medical texts replete with Greek and Latin terms. While medical terminology itself is generally familiar within medical colleges, ambiguity arises particularly with Latin and Greek terms. Despite their prevalence, these terms can still present hurdles due to their ancient origins and nuanced meanings. Most medical lexicons trace their roots back to these classical languages, and over time, these terms have become integrated into various languages, including Arabic and English. However, the process of naturalization hasn't eradicated all ambiguities, leaving students grappling with interpretations and translations. Further research could delve into strategies for mitigating these linguistic challenges, exploring approaches such as enhanced language education or specialized translation tools tailored to medical terminology. Additionally, investigating how different educational institutions address these challenges could provide insights into effective pedagogical methods for medical language acquisition.

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