

Endocrine terminology in Corpus Hippocraticum

“In memory of Professor D.G. Ikkos”

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INTRODUCTION

Many Greek and Latin medical terms are in use on account of the fact that modern day Western conventional medicine originates in Greek and Roman antiquity. The writings of Hippocrates and Galen, as well as of Celsus and Plinius, remain the principal source of the constituent elements of medical terminology and the base for the correctness of Western scientific onomatology. However, the number of Latin terms, with the exception of the vocabulary for medical law matters, is less than the number of Greek terms in all the specialties of medicine. Moreover, numerous hybrid formations, i.e. words composed of both Greek and Latin elements, exist in the Western medical terminology.

The purpose of this article is to present some examples showing that even modern endocrinological terminology is, for the most part, dominated by the medical language of Corpus Hippocraticum.

ONOMATOLOGY OF HORMONES

Androgen is the male sex hormone which takes its name from the Greek words aner-andr=man and

Key-words: Endocrine terminology, etymology
Medical terminology

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Received 07-11-2001, Revised 30-11-2001, Accepted 18-12-2001

genos=born of a specified kind, based on gignomai=to be born, become.

Gonadotropin is the hormone which stimulates the activity of the gonads, a name deriving from the Hippocratic term gonas or gone=generation, seed and tropin from the verb trepein=to turn

Oestrogens are a group of hormones which promote the development and maintenance of the female characteristics of the body. Hippocrates uses the word oestromania describing the permanent and persistent sexual desire, while oestrus characterizes the recurring period of sexual receptivity and fertility in many female animals. In Greek mythology, oistros was an insect inducing frenzy in females. All the hormones of this group include the word oestrus in their names (Oestradiol, Oestriol, Oestrone).

Oxytocin is the hormone that causes increased contraction of the womb during labour. The same adjective (oxytokios) is used by Hippocrates for the drugs that aid the progress of the process of labour.

Somatotropin is a synonym for the growth hormone, deriving from the Greek soma=body and the verb trepein=to turn. Hippocrates uses the term body as the converse to the terms soul and spirit but also with the meaning of organism. The verb trepein has the same meaning in the Hippocratic text and is commonly used for hormone names together with the noun tropin=he who turns.

Vasopressin is also called antidiuretic hormone (anti=against and diuretic=promoting water excretion by the kidneys). The adjective diuretic is used in the Hippocratic text with the same meaning.

ONOMATOLOGY OF SYMPTOMS AND DISEASES

Acromegaly is the term for the abnormal growth of the hands, feet and face, caused by overproduction of growth hormone by the pituitary gland. It derives from the Greek word akron=tip, extremity and megas= great, large. In the Hippocratic Collection the term akron is also used for the hands and feet.

Cryptorchidism is another Greek term from the words kryptos=hidden and orchis=testicle, to characterize the condition in which one or both of the testes fail to descend from the abdomen into the scrotum. In the Hippocratic Collection the word kryptos is used in cases of cancer, meaning the invisible, the undiagnosed cancer. The term orchis is used with the same meaning.

Gyn(a)ecomastia is characterized by the enlargement of a man's breasts due to hormone imbalance and its origin is the Greek word gyne-gynaika=woman, female and mastos=breast, used also in the Hippocratic Collection.

Hermaphroditism is a medical term deriving from Greek mythology. Hermaphroditus who combined male and female sex characteristics and sex organs was the son of the gods Hermes and Aphrodite. There is also the term Pseudo-hermaphroditism (pseudes=false, fake, not genuine). In the Hippocratic Collection, the term Aphrodisiasm and Aphrodisius are used to denote sexual desire.

Hypogonadism is the term used to describe the reduction or absence of hormone secretion or other physiological activity of the gonads (testes or ovaries), deriving from hypo=under and gonad, as mentioned in Gonadotropin

Menarche and **Menopause** derive from the word emminia=the menstrual period, which is used in the Hippocratic text with this meaning and arhe=beginning and pausis=cessation, to denote the first occurrence of menstruation and the end of menstruation, respectively

Myxoedema is the condition caused by the malfunction of the thyroid gland, deriving from the Greek word myxa= mucus and oedema= swelling, characterized by an excess of watery fluid collecting in the cavities and tissues of the body.

Osteoporosis is the term for the condition in which the bones become fragile from loss of tissue, typically as a result of hormonal changes. It derives from the Greek term osteo=bone, used by the Hippocratic text with the same meaning and poros= passage.

Pheochromocytoma is a tumor of the adrenals deriving from the Greek words pheos= grey or brown,

chroma=color and cytoma= cell tumor. The Hippocratic text uses the word chroia and the adjective chrothis= colorful and cyto- derives from the Greek kytos=vessel.

Tetany is a condition of intermittent muscular spasms, caused by calcium deficiency. The Greek word tetanus= muscular spasm, from the verb teinein=to stretch, is used by the Hippocratic Collection as the adjective tetanoid with the contemporary meaning

DISCUSSION

It is well known that the word hormone derives from the Greek verb hormaein meaning to rush, to set in motion and in the Corpus Hippocraticum this verb is used with the same meaning. The term Endocrinology is a synthesis of the Greek words endon=within, krinein/ekkrinein=sift and logos=speech, word, telling, denoting logy = a subject of study. In the Hippocratic text, the verb krinein is used with exactly this meaning. The glands are characterized as endocrine (secreting hormones), the specialist is called endocrinologist and the subspecialties concerning the nervous system and the brain respectively are called Neuro-endocrinology and Psycho-neuro-endocrinology¹, from the Hippocratic neuron=nerve and psyche=soul.

The Hippocratic Collection includes a broad vocabulary² of medical terms, and has never ceased to provide the basis for the creation of scientific terms, even for very recent discoveries, as for example the terms gene or cyclin, and this phenomenon is likely to endure.

In conclusion the tremendous current advances in Endocrinology have made the continuous creation of new scientific terms a necessity in order to designate new concepts resulting from the discovery of new hormones¹ and from new bio-technological inventions.

The increasing number of new terms from the Corpus Hippocraticum in modern Endocrinology represents one of the best examples that Greek is still a living medical language for international medical onomatology and must be treated as such for the universal dissemination of scientific knowledge.

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