The Greek origin of caduceum: Æsculapius

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SUMMARY

Introduction: Medicine history gives us the chance to reflect about the Caduceus as the synthesis of the dialectic of the sensible and spiritual life. This opens and horizon of comprehension and allow us to recover the legend of Asclepius and it's cult with the different symbolic elements that structure it.

The legend: The historic and mythological references about Asclepius' existence gives structure to the legend in a real and not-real environment perduring in the occidental medicine tradition as a mystical reference to the deity for the medical practice.

The cult: It's based in the incubation and synthesizes healing rites and therapeutical practices, as medical as surgical; exercise, sleep cures and amusement activities.

The symbol: The linguistic origin of Asclepius' name, the symbolism of the legend protagonists and the iconographic representation of their attributes, converge in the Caduceus to represent the medical practices and ideas synthesis, all them related to the human life.

Conclusion: Asclepius' perception transcends the Olympic divinity and situates him as the healing archetype; that's why Caduceus is consistent with the system-world representation that rules the actual medical practice.

Keywords: Caduceum; Æsculapius; Æsclepius; History of medicine; Philosophy of medicine.

El origen griego del caduceo: Esculapio

RESUMEN

Introducción: La historia de la medicina posibilita reflexionar sobre el caduceo como la síntesis de la dialéctica de la vida sensible y la espiritual. Esto abre un horizonte de comprensión y permite recuperar la leyenda de Esculapio y su culto con los diferentes elementos simbólicos que la componen.

La leyenda: Los referentes históricos y mitológicos de la existencia de Esculapio dan consistencia a la leyenda en un ámbito de realidad y ficción perdurando en la tradición médica occidental como el referente místico de la deidad para el ejercicio de la medicina.

El culto: Se basa en la «incubación» y sintetiza ritos de sanación y prácticas terapéuticas, tanto médicas como quirúrgicas, además de ejercicio, curas de sueño y actividades recreativas.

El símbolo: El origen lingüístico de su nombre, el simbolismo de los actores de la leyenda y la representación iconográfica de sus atributos, convergen en el caduceo para representar la síntesis de ideas y prácticas médicas asociadas con la vida humana.

Conclusiones: La imagen de Esculapio trasciende la divinidad del olimpo y se sitúa como el arquetipo de la curación; por tanto, el caduceo es consistente con la representación de un sistema-mundo que domina el ejercicio de la medicina contemporánea.

Palabras clave: Caduceo; Esculapio; Asclepio; Historia de la medicina; Filosofía de la medicina.

The study of the origin of caduceus goes back to the ancient Greece where its appearance occurs in medicine around Aesculapius figure, whose essential attribute is the caduceus formed by a serpent coiled in a stick symbol that is currently identified as the distinctive emblem of medical profession.

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Nevertheless, little is known about the caduceus as a product of a certain number of historical facts, nor as the cultural demonstration of a process of religious appraisal of reality during a specific age; and even less as the reflection of the synthesis of an attitude towards life, at the same time mystical, magical and religious¹.

The historical analysis of the caduceus, oriented towards the search of its real origin, as well as of the historical age in which it was appointed as the Medicine Universal Emblem, allows reaching the following conclusions²:

- The caduceus is the union of two symbols: the stick and the snake, being a symbolic instrument of a mystical type.
- · Its origin goes back to prehistoric civilizations.
- This origin is highly associated to myths' development, in which the snake and the stick posses a deep symbolism.
- It is possible that the union of the snake and the stick is the expression of socio-cultural development of several cultures, independent or not, of Greek civilization.
- The survival of the caduceus is due mainly to the role played by alchemists during Middle Ages, who interpreted this symbol as a part of a relevant cosmogonic vision.

In this context, and with the purpose of promoting the caduceus analysis as the expression of a functional and real connection related to the reality of Man and also as a dialectic relation of opposites, sensitive and spiritual life, of life and death, of health and illness³, we recover in this communication the tradition of Aesculapius legend of to determine those symbolic elements that allow us to expand and give sense to the comprehension horizon of caduceus at the beginning of the 21st century.

THE LEGEND

Löbsak points out that the name *Asclepius* has its origin in the Greek words *spala*, *aspala* or *skalops*, expressions that appoint to the mole. Aesculapius is the name that the Romans gave to the Greek God Asclepius⁴.

At the margin of mythology, data about this character appears ratified by authors of Antiquity among which stand out Homer, Hesiod and Pindar; from that we deduce Aesculapius was really a famous doctor and war hero, who was born in Trica located in the region of Thessaly known today as Tricalia⁵.

Aesculapius, according to the tradition, was the illegitimate child of the virgin Coronis and he was born in a very violent way^{4,6}, living in XIII Century BC. He was the God of Medicine, protector of health, worshipped by Greeks under the name of Asclepius or Asclepios. His cult is not previous to the Eolians expansion at the north of Greece, and there is no certainty whether, by the time of Homer, he was considered already as God or only as a doctor. His attributes are the cup -which contains a healthy beverage, and the traveler cane -around which the snake is coiled-as a clairvoyance sign among Greeks that figures next to all medical divinities⁷.

The historical referents of Aesculapius existence are diverse and mix reality and fiction, legend and myth, emphasizing the references that Homer and Hesiod pointed out. Homer dedicates the XIV Hymn to Aesculapius, in which the following is indicated: «I begin to sing of Asclepius, son of Apollo and healer of sicknesses. In the Dotian plain fair Coronis, daughter of King Phlegyas, bare him, a great joy to men, a soother of cruel pangs. And so hail to you, lord: in my song I make my prayer to thee!»⁸.

In turn, in the Orphic Hymns, Hesiod dedicates the number LXIV to Asclepius, and expresses himself in these terms: «Great Aesculapius [Asclepios], skill'd to heal mankind, all-ruling Pæan, and physician kind; Whose arts medic'nal, can alone assuage diseases dire, and stop their dreadful rage: Strong lenient God, regard my suppliant pray'r, bring gentle Health, adorn'd with lovely hair; Convey the means of mitigating pain, and raging, deadly pestilence restrain. O pow'r allflourishing, abundant, bright, Apollo's honor'd offspring, God of light; Husband of blameless Health [Hygeia], the constant foe of dread Disease the minister of woe: Come, blessed saviour, and my health defend, and to my life afford a prosp'rous end»⁹.

But the most consistent tradition tells how Apollo fell in love with Coronis, to whom he presented himself as a swan in Boibesm lake, giving rise to the legend of Leda¹⁰, and snatched by her beauty he courted her, and from this union Coronis got pregnant. But Coronis was engaged, by her father's will, to her cousin, Isquis, and contemplated her approaching wedding carrying Apollo's son in her womb⁴. A raven, that at that time was a bird with white feathers, carried the forthcoming wedding news to Apollo who got furious and gave black feathers to the raven, which wears them since then as sign of sorrow, and then he shot his arrows to Coronis's fiancé, while Artemis, Apollo's sister, killed the unhappy Coronis⁴.

When Apollo saw her lover dying, he felt compassion for her unborn child and took him out of Coronis's womb and carried him to the cave of the centaur Chiron in the land of Pelion, in Thessaly^{4,7}. Apollo trusted Aesculapius education to the centaur Chiron, who instructed him in an especially intensive form on the art of healing. Soon, he could practice medicine in the same way of the saga, showing great facility to learn.

When Aesculapius became a youngster, his successes extended around the world in two fundamental domains: war and medicine. It is told that Aesculapius participated in the Trojan War with his two sons, Machaon and Podalirius and, according to other versions, he also accompanied Jason in the Argonauts expedition⁵. In the field of medicine, he became so skillful on the art of healing that besides curing the ill he returned the dead back to life.

Aesculapius's family was linked to different activities related to health care and medical practices. His wife Epione relieved the pain. His daughters were Hygieia and Panacea. The former was known as the deity of health and prophylaxis and the latter the deity of treatment; his sons, Machaon and Podalirius were protective Gods of the surgeons, while Telesphorus, who always accompanied him, signified convalescence¹¹.

Aesculapius's death was as tragic as his birth, being marked by the influence of the myth and the participation of the Gods of the Olympus. Pluto accused him of having diminished the number of souls descending to hell, and Zeus, in revenge, killed him with his rays. After his death, Aesculapius was venerated as God and in his honor were raised the «Asclepieions» or medical sanctuaries where Greek people attended seeking for their lost health¹².

THE CULT

Consensus among the historians of medicine exists in which the worship of Aesculapius had its origin in Thessaly, around the VI Century BC, when temples were built and dedicated to his cult called asclepions, whether in Trika (according to *the Iliad* and Hesiod) or in Epidaurus (according to the archaeological finds).

The influence of his cult was expressed in the construction of more than 300 sanctuaries in many cities of the Greco-Roman World, being the most famous the one in Epidaurus, situated in a valley surrounded by hills covered with pine forests where lived snakes, sacred animals, turning the city into the center of the worship to Aesculapius, and from this city extended to all the Ancient World⁵.

The worship to Aesculapius, in the context of the Greek priestly medicine, is based on the «incubation», i.e. the suggestion produced during the sleep, although healing rites and therapeutic practices that have a rational origin were incorporated.

The «incubation» consisted of a therapeutic dream inside an adequate room for such effect. The patients dreamed that Aesculapius appeared to them and expelled evil, and when they awoke, they felt cured^{5,13}.

Among the healing rites that were practiced during the staying inside the asclepiones, it was common that the priest appeared during the night in the sacred indoors of the temple, where a great number of patients remained in the dark and were touched in the sick part of the body with a wand or a snake (the stick was an attribute of Aesculapius and the snake was a curator God -later the symbol of the medical art due to its mysterious and infernal character of divinity-) which is extensively described in the *Pluto* of Aristophanes.

The therapeutic practices that were carried out in the asclepiones included properly called medical activities as well as surgeries, besides requiring the observance of strict rules that were prescribed by doctors and priests; in such a way the daily activities of the patient were planned: the exercise alternated with the rest, the active and passive occupation of the spirit, the special diets, the cures of sleep, the use of medicinal water, the attendance to the theater and the participation in the temple ceremonies.

It was traditional among the patients that were attended and healed in the asclepions to present votive offerings that consisted of reproductions of the treated organs as well as the donation of wakes in which healings were engraved⁵. Both elements have contributed to clear our knowledge of the happenings in the interior of the temples of health dedicated to Aesculapius¹⁴.

THE SYMBOL

To explore the symbolism that underlies in the caduceus as attribute of Aesculapius it is precise to recover at this time an assembly of elements that expand and give sense to the horizon of comprehension about the origin of the medical caduceus.

The first element centers in the linguistic origin of the name of Asclepius, which derivation may come from Greek words that appointed to the mole, which was considered as a damned and condemned animal by the Gods to a somber existence in the subterranean world deprived of light and to whom curative magic powers were attributed⁴.

The second element lies in the legend itself of Aesculapius, that independently of the version exposed by Pindar or Ovid¹⁰, in it Apollo, Coronis, Isquis, Chiron, Artemis, a raven, and finally, Zeus appear in a consistent way⁴⁻⁶, providing the legend with a symbolic consistency for which it is precise to examine each one of these actors that allow to structure the plot of the mythical legend of Aesculapius.

Zeus is the main God of the Olympus. Apollo, God of the light⁴, was the doctor of the Olympic Gods from whom he receives the name of Alexikakos (the one that moves away the illness) and his arrows carry the plague or the epidemics in the distance, but could also prevent or avoid them. Accompanied by his sister Artemis, he teaches medicine to the centaur Chiron. Coronis, a mortal woman, was a daughter of the Lapiths' king in Thessaly. Chiron, half horse, half God, was Saturn's son (Zeus), versed in old legends, music and surgery was the tutor of Hercules, Achilles and Aesculapius¹². It was told of him that not just he was a dexterous hunter and friend of music, but he also knew the properties of curative herbs, how to use them and how to convey his knowledge to his disciples. Chiron could also act with the surgeon knife and to carry out miraculous healings, pronouncing formulae of enchantment before beginning them⁴.

The third element centers in two fundamental points: the iconographic representation of the attributes of Aesculapius and his worship executed in the asclepions. In both, they emphasize the presence of the cane of the traveler and the snake.

Supported on these three elements, the image of Aesculapius and the caduceus together could be

comprehended as the symbol that represents the synthesis of ideas and practices, impressions and rites, facts invoked and desired, feared or abhorred, marvelous, strange and inexplicable happening, always associated to the most significant events of the human life, among the ones stand out health and illness, and that express in itself the conjunction of the stick and the snake as a symbol that gathers and melts the meaning of both in an single one.

Thus, the cane of the traveler, the stick or baculum, that can be understood as the «magic wand» employed to concentrate the supernatural forces to get rid of enemies, was probably originated after the apparition of the symbolism of the snake¹⁴; even so, as the cane of the traveler, is susceptible of sprouting new leaves, then signifying the possibility of a new or renewed life.

On the other hand, according to Castiglioni⁷, in the origins of the Greek civilization, the worship to the snake was unknown; being probable it was imported from Egypt or from Assyria, without knowing the Greeks the symbolism that these cultures gave to it. The snake constitutes the center of attention of the therapeutic and religious rite that was practiced in the temples dedicated to Aesculapius. It is a fact that the snake is the universal symbol of the supernatural in prehistory, and in the area of the Greek mythology symbolizes divination, prudence, regeneration and healing for which it has represented in the history of the humanity the magical powers of healing that have been attributed to all the medical divinities^{16,17}.

CONCLUSIONS

The image of Aesculapius has been immersed in legend and myth, suiting that authors attribute him a real existence⁵ as well as his non-existence⁷.

Whether Aesculapius had really existed or he is a simple fiction, the mythology seized its figure, made a God of him and later attributed his origin to the lineage of the Gods. The unlucky Aesculapius, the neonatal born in Caesarean section was considered as the God of the medicine and he was yielded worship in all Greece, as the Son of light, reason, life, but also as a tectonic deity of the underworld, in short of the death; being situated the art of medicine between the life and death, Aesculapius constituted as the archetype of a healer¹⁵.

In this context, the caduceus seems to incorporate to

the medical divinities the possibility of mediating dialectically between two opposites: the land and the sky, health and illness, life and death; in short, the caduceus is consistent with the representation of a world-system that dominates the exercise of the medicine since its begging and even now when in the contemporary medicine the magic healing has been substituted by a rational focus that promotes healthy life and centers the expectations of the patient in the respect for the scientific-technological advances of medicine, in which the complexity of healing inside the archetype of healing is associated to the unconscious identification of the doctor with the power to use and to manipulate the ways of living in order to face the illness of the patient.

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