

The Rod and the Serpent: History's Ultimate Healing Symbol

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Published online: 17 June 2010
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Abstract The snake has served as a medical emblem for more than 2400 years, since its association with the ancient Greek god of medicine and healing, Asclepius, in the 4th century BC. Its symbolic background can be traced further back to the worship of gods of earth's blossom in ancient Egypt and earth-related deities of the archaic period of Greek antiquity. It is featured entwined around a staff of knowledge and wisdom in most anaglyphs depicting Asclepius. The snake was impressed in the Old and the New Testament as well as in the Christian tradition as a symbol of sin, rejuvenation, death, resurrection, asthenia, and therapy. It is postulated that the double-snake motif was reintroduced by Renaissance philosophers as a medical emblem due to the symbolic connections of Hermes with deliverance and redemption. However, its use during the last two centuries seems to lack substantial historical background. The historical, mythological, and traditional retrospection of the snake's symbolism validates its appropriateness in the health-care field.

Introduction

The history of man's relationship with the snake has been characterized by emotions ranging from revulsion, hatred, and fear through to wonderment, adoration, and even idolization. This ancient duality of our feelings toward the serpent gave rise to several myths and beliefs and rendered it an ideal symbol of healing, wisdom, immortality, rejuvenation, love, sensuality, sin, and death [1–4]. The snake, usually entwined around a staff, was already firmly established as a symbol of healing in the classical period of ancient Greece (500–323 BC) [5, p. 137]. However, this symbolic conjunction of the serpent with the ancient Greek god of medicine, Asclepius, seems to have arisen from the tradition of worship of gods of earth's blossom in ancient Egypt and earth-related (*chthonic*) deities in the archaic period of Greek antiquity (800–500 BC) [1, 6].

The healing symbol of the snake was present in the ancient Hebraic tradition and later passed into the Christian religion as a representation of God's indulgence and spiritual rejuvenation. The Israelites of the Old Testament, suffering from snakebites while wandering in the desert, became healed when looking upon the bronze symbol of the serpent raised by Moses [7]. In Christian tradition, the symbol of the snake also stood for temptation and redemption, asthenia and therapy [8]. The crucified Christ reflects the snake raised by Moses in the desert, since "*Christ redeemed us from the curse of the law by becoming a curse for us*" [9].

The snake continued to serve as a healing symbol between the 6th century BC until the Renaissance, as documented by contemporary iconography and manuscripts. It was then revived during the Renaissance to represent the provider of antidotes to snake poison—reportedly one of the most desirable "cure-alls" of the 16th

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century. Evidence also lends support to the theory that the emblem of the entwined double snake (the Roman “caduceus”) was corrupted into the symbol of the healing arts by philosophers of this period [10]. The past two centuries have seen a mixed usage of the single-snake-entwined staff of Asclepius and of the caduceus by several medical organizations worldwide.

In the present review we attempt to decipher the often enigmatic symbolic connections between medicine and the snake from ancient history to the present day.

Ancient Greece

Although the figure of the snake is featured in most carved ornaments (*anaglyphs*) depicting Asclepius from the 4th century BC onward, the origin of this symbol can be traced to Minoan Crete and the ancient peoples of Thessaly, the mythical homeland of Asclepius in northern Greece, in the worship of deities of earth’s blossom. The perpetual power of the earth’s self-renewal and rejuvenation was deified in the figure of the Minoan “Great Goddess” Diktyнна (Fig. 1). The earth-related character of the goddess is reinforced by her connection to the serpent; its ability to perpetually rejuvenate by shedding its skin made it an underworld symbol of renewal of the vital powers of life, a “kind demon” [11]. In Thessaly we encounter the worship of the goddess Eileithyia, another deity of earth’s blossom. According to contemporary beliefs, Eileithyia was inseminated each year by a snake; the latter was then transformed into a god with healing attributes [12]. Pötscher investigated the snake’s symbolism in the classical period of ancient Greece and proposed three different metaphorical meanings: (1) the earth’s fertility, (2) a connection with one’s dead ancestors, and (3) the continuity of the genus by the recycling of life from death [13]. During this period the rejuvenating power of the earth—the same recycling of life and death substantiated by the figure of the snake—was therapeutically channeled into patients by the god Asclepius. According to a legend, Asclepius assumed the form of a serpent to deliver Rome from a plague, his healing power being provided by snakes slithering over the bodies of afflicted citizens [14]. The legend’s adoption into everyday life is reflected by the depiction of Asclepius, in the form of a snake, on a bronze coin dedicated to an unwell Caesar by the citizens of the isle of Mytilene, wishing him a speedy recovery [15]. Furthermore, according to contemporary beliefs, the sick attending the temples of Asclepius were visited in their dreams by the physician assuming the form of a serpent. In Asclepian anaglyphs of classical ancient Greece, the snake accompanies the healing god, entwined around his staff or coiled beneath his throne (Fig. 2). From great temples to simple



Fig. 1 “Great Goddess,” the deity of the Minoan Crete, Diktyнна, is depicted holding a snake in each hand, highlighting her power over earth’s blossom, 17th century BC. Archaeological Museum of Heraklion, Crete, Greece (© Hellenic Ministry of Culture and Tourism—Fund of Archaeological Resources)

households, the presence of a snake was thought to provide protection from misfortune throughout ancient Greece (*οἰκουρός ὄφις* > *οἶκος* = house + *οὔρος* = guard, *ὄφις* = snake), another tradition that continues to this day.

In contrast, Asclepius’ daughter, the goddess Hygeia (*lit.* “health”), is rarely accompanied by the snake, as she is the impersonation of the *result* of its therapy, not of the therapeutic process itself [5, pp. 137–138]. Furthermore, when the snake is depicted together with the figure of the goddess Hygeia, it is usually coiled around her and is being fed by her through a bottle; the symbolism of this complex remains elusive however.

Going further back in history to the 16th century BC, we encounter the first figures of a serpent coiled around a tree. In the cult of the ancient Greek Minoan “Great Goddess” Diktyнна, her sacred tree was the mythical Tree of Life, grown in the middle of The Garden of Hesperides, with its fruits providing eternal youth to any who could reach them. The tree was guarded by a snake coiled tightly around its trunk [12]. The snake and the tree both served as symbols of rejuvenation and eternity. Ancient Greeks used to plant a tree over each grave for this reason [16], a practice which survives in some regions of Greece to this day.

Trees were not only a symbol of life and rejuvenation, but also of knowledge. One myth refers to the god Apollo, the father of Asclepius, and the goddess Gaea (*lit.* Mother

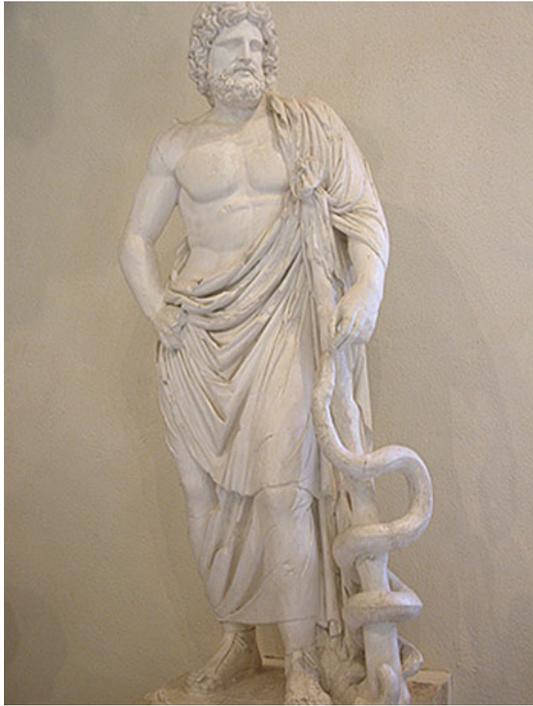


Fig. 2 Statue of Asclepius holding his staff, with the snake entwined around it. Museum of the Asclepieion of Epidaurus, Greece; IV. Revenue Service of Prehistorical and Classical Antiquities, Hellenic Ministry of Culture and Tourism (© Hellenic Ministry of Culture and Tourism—Fund of Archaeological Resources)

Earth). Apollo adored Gaea's three daughters, the nymphs Korykeia, Daphne, and Thyia. However, only Daphne resisted Apollo's desire to merge with her. In order to escape, she asked her mother Gaea to transform her into a laurel tree [17]. Daphne thus became the oracular tree of Apollo in Delphi until its abandonment in the 4th century AD; the chewing of laurel leaves purported to induce the priestesses' oracular trances. Indeed, the name of its berry, the *bacca laureus* gives us the roots of the modern words "Baccalaureate" and "Bachelor" (as in Bachelor's degree), associated with high learning and distinction. The staff of Asclepius represents the above symbolisms of the tree, the knowledge, the wisdom, and the continuity of the medical profession.

The conjunction of these two symbols—the entwined guardian snake with powers of rejuvenation and healing, and the tree of healing and knowledge—is reflected in the Asclepian symbol.

Holy Bible and Christian tradition

The Old Testament of Christian and Jewish tradition provides several symbolic references to serpents. Adam and Eve were tempted to betray God by a serpent coiled around the Tree of Knowledge [4]. The snake thus became the

symbol of the devil, of malevolence. The power of serpents to do evil returned when Moses was leading the Israelites through the desert:

“And the people spake against God, and against Moses, Wherefore have ye brought us up out of Egypt to die in the wilderness? for [there is] no bread, neither [is there any] water; and our soul loatheth this light bread.

And the Lord sent fiery serpents among the people, and they bit the people; and much people of Israel died.

Therefore the people came to Moses, and said, We have sinned, for we have spoken against the Lord, and against thee; pray unto the Lord, that he take away the serpents from us. And Moses prayed for the people.

And the Lord said unto Moses, Make thee a fiery serpent, and set it upon a pole: and it shall come to pass, that every one that is bitten, when he looketh upon it, shall live.

And Moses made a serpent of brass, and put it upon a pole, and it came to pass, that if a serpent had bitten any man, when he beheld the serpent of brass, he lived.”

Here, the parallels to the Asclepian staff are clear—healing by the power of God through a symbolic snake upon a staff.

In the New Testament, Jesus Christ assumes the figure of the snake: a healing Messiah rose on the Cross to cure mankind's ills, “just as Moses lifted up the serpent in the wilderness, so must the Son of Man be lifted up, that whoever believes in him may have eternal life” [18]. Throughout Christian history we can find the symbol of the snake in religious iconography and manuscripts. According to St. Gregory Palamas' writings (14th century AD), “...like physicians who, after taking the snake's flesh and purify it from the poison, they blend it with remedies and heal the ones who have been bitten by snakes.” In other manuscripts, the shedding of the snake's skin parallels the therapeutic progress of falling and rising, battling against our pathos, and reaching the state before the protoplasts' fall [19]. The Cross subsequently assumed the place of the Asclepian staff during the Byzantine period (6th-15th century AD), and the cross with the entwined snake was subsequently used as a medical symbol [20].

First centuries AD until renaissance

The symbolic character of the serpent passed from ancient Greeks and Romans through the early Christian tradition to

the physicians of the first centuries AD; the symbolic substance of the snake is here clearly redefined by the use of its poison (theriac) in pharmacology. There is unchallengeable evidence that the theriac was considered the contemporary panacea until the Renaissance period (14th–16th century AD) [21, pp. 107–116]. Several manuscripts of Galen (130–201 AD), the physician who most influenced the medical community until the 16th century AD, reveal his admiration of the snake and the theriac's attributes [22]. Renaissance iconography also underscores the significance of the snake's poison in contemporary pharmacopoeia and medicine, as numeral icons and frescos depict pharmaceutical jars bearing the snake symbol, often together with the monograms of Christ or the Virgin Mary [23].

Furthermore, during the early Renaissance period in Europe, the double-snake symbol was adopted for the first time as a medical emblem [21, pp. 117–132]. The reasons behind this remain unclear. The caduceus or kyrekeion (*κηρυκκειον* > *κηρυξ* = messenger) is the traditional accessory of the ancient god Hermes, messenger of the gods and guide of the dead to the underworld, and perhaps the only ancient god who was welcome in Olympus as well as in Hades. According to ancient beliefs, Hermes guided departed souls through an unpredictable journey from the world of the living to Hades and brought the sleeping back to life with his wand [24]. Hermes had also a principal role in the Eleusinian mysteries, in which the representation of the return of Persephone from Hades to Earth, escorted by god Hermes, was the central ceremony. According to Homer, the Eleusinian mysteries promised initiates a joyful life as well as a good fate in Hades [25]. Sophocles discloses: *“Thrice happy are those of mortals, who having seen those rites depart for Hades; for to them alone is it granted to have true life there; to the rest all there is evil.”* [26]. The initiation helped ancient allegiants to face death as the start of a new life; this is underscored by the demonstration of a spike by the *hierophant*, the priest of the mysteries, symbolizing the new life arising from the seed.

Another interesting interpretation of the caduceus symbolism in medicine during the Renaissance is provided by Schouten and refers to Hermes as the patron of the alchemists [21, pp. 120–124]. The hermetically sealed glass flasks served for the refinement of metals which could be converted to gold according to contemporary theoretical scientific data. The respective therapeutic purification of the sick is excellently represented on a 16th century picture of the alchemist Salomon Trismosin, depicting an old king in a sealed flask undergoing purification under the motto *“Filius natus ex me, maior est me”* (“Son born by me, greater than me”), while Hermes is riding the clouds in a chariot holding the caduceus. As alchemy was the precursor of chemistry and pharmacology, it is speculated that

Fig. 3 Caduceus or kyrekeion, the traditional symbol of god Hermes



the symbol of the patron of the alchemists thereby became an allegorical emblem of medicine.

While there is no evidence of the use of the caduceus as a symbol of healing art during antiquity, it seems that this symbol underwent a radical revision during the Renaissance. In addition, it seems reasonable that the double-snake emblem emphasized for contemporary philosophers the double symbolism (illness and therapy, sin and redemption) and man's traditionally contradictory feelings for serpents. This antithesis is underscored by the characteristic face-to-face position of the two snakes (Fig. 3). There is no substantial distinction between “good” and “harmful” factors affecting the human organism and psyche; the same factors can have multiple effects on different substrates, and eventually this unknown “element,” which prescribes disease or cure, even if the therapeutic process is state of the art, remains enigmatic. Thus, although the caduceus is considered to have been erroneously adopted as a medical symbol during the Renaissance, it carries a credible symbolic value: the souls' journey through unknown paths to redemption is parallelized with the disease, and Hermes and his staff are redemptory symbols of the unwell.

19th century AD to the present day

It is speculated that the first official use of the caduceus in modern medicine was introduced by the United States Marine Service in 1857 [27]. The subsequent use of the symbol by the United States Army Medical Corps seems to have been due to a lack of awareness of the historical distinction between the caduceus and the rod of Asclepius rather than based on its symbolic use during the Renaissance [11]. Probably because of this initial mistake, several medical organizations throughout the world have adopted the double-snake symbol to represent healing, wisdom, and

Fig. 4 Emblem of the Medical Association of Athens



rejuvenation. According to a 1992 survey in the US, only 62% of professional medical organizations used the rod of Asclepius, whereas 76% of commercial organizations used the caduceus [28]. The double-snake motif is currently not in use by any medical association in Greece, whereas the single snake serves as the emblem of most Greek local medical associations (Fig. 4).

Conclusion

The healing symbol of the snake is as ancient as the medical art itself. Its use is indistinguishably connected with the ancient Greek god Asclepius and is symbolically associated with ancient deities of earth's blossom. The rod, symbol of knowledge and wisdom, was replaced by the Christian cross during the early centuries AD and the snake by Christ himself, providing spiritual rejuvenation through self-sacrifice and Resurrection, drawing parallels to the healing brass serpent raised by Moses in the desert. The snake's unique ability to shed its old skin represents a triumph of spiritual self-renewal over death. The original reasons underlying the selection of the caduceus as a medical symbol during the European Renaissance remains, however, ambiguous. It has since been adopted, somewhat incorrectly, by medical organizations worldwide over the past 150 years.

The snake has always represented polar opposites—illness and therapy, sin and redemption, death and rejuvenation. This duality, and its unpredictable nature, serves as the perfect embodiment of the imponderable factors of the medical art: even if a therapy is applied, the outcome often remains uncertain.

Acknowledgments The authors highly appreciate the kind release of Figs. 1 and 2 by the Archaeological Museum of Heraklion, Crete, the Museum of the Sanctuary of Asclepius, Epidaurus, and the Hellenic Ministry of Culture and Tourism. We especially thank the associate director of the Archaeological Museum of Heraklion, Archaeologist Ms. Maria Englezou.

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