

ANCIENT HERPETOLOGY I

ABOUT SNAKE BITES AND UNWANTED PREGNANCIES

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EVA LUNA

Eva Luna was begotten on the deathbed of her father. When the yellow-eyed Indian was bitten by a poisonous snake, a *sucurucú*, his boss, Professor Jones, wanted to let him die peacefully, so that he could mummify him afterwards. The crazy scientist had wanted to enjoy for years the sight of his gardener stuffed in the pose of a priming juggler.

The fact that this absurd operation did not take place is due to Eva Luna's mother, Consuela, who against the order of her master lived up to her name and took care of the dying Indian in every possible way and tried to cure him: she washed the wound on his leg with soap and water, she made two deep incisions with a knife normally used to kill chickens and sucked out the poisoned blood as much as possible. After this she wrapped the man in turpentine-soaked clothes, had him drink laxative herb teas, applied cobwebs on the wound and she graciously allowed the cook of the house to light candles for all the saints. For you never know.

After a while the patient was found to produce red urine, which Consuela cured using sandalwood extract, an unfailing remedy against infections of the urinary tract. But in spite of all her good care the leg became gangrenous and the Indian started to be in agonizing pain. This did not prevent Consuela from continuing her enthusiastic care and soon it turned out that her carenesses produced some rather unusual reactions in the dying body.

Anyone who wants to become acquainted with a detailed description of an alternative therapy against snake-bites, should read the beautiful book of Isabel Allende. Here, I would like to confine myself to the somewhat expurgated remark that Consuela accepted the erected invitation of the almost dead Indian and that she also let this therapy take place with conviction and devotion. Result: the patient recovered, the fever abated, his respiration got back to normal, he asked food and Consuela got pregnant. Consuela understood that she had unintentionally discovered an antivenin against poisonous snake bites. And thus Eva Luna was begotten (Allende, page 22 ff.).

PLINIUS

What Consuela established by experience, could be read for centuries in Plinius Maior. This Roman intellectual (23 or 24-79 A.D.) is the author of a gigantic quantity of scientific

works, of which only one part has survived: his *Naturalis Historia* which contains 37 books. This encyclopedic work showing a very broad 'scientific' interest, contains all the information available in Plinius' time in the field of geography, ethnology, anthropology, physiology, zoology, botany, mineralogy and metallurgy. About 20,000 issues are dealt with and Plinius consulted 473 authors (Plinius, Vol.I, page 13; Van der Voort, 1989a, page 54).

Part VIII of the Loebseries of the *Naturalis Historia* contains the books XXVIII - XXXII. Here we find a treasure of 'medical' information. Much of which is of interest to herpetologists, since many subjects mentioned concern themselves with therapies for snake bites, their prophylaxis and herpetological 'pharmacology'.

When giving this compiled information, Plinius' intentions were absolutely honourable. I give a translation on his account:

Well then, shall I, who have described plants and forms of flowers, including many rare things that are difficult to find, say nothing about the benefits to man that are to be found in man himself, nothing about the other kinds of remedies that live among us, especially as life itself becomes a punishment for those who are not free from pains and diseases? Surely I must, and I shall devote all my care to the task, although I realize the risk of causing disgust, since it is my fixed determination to have less regard for popularity than for benefiting human life (Plinius, XXVIII, i)

Notwithstanding Plinius' good intentions, only a fraction of the following will be sufficient to make the modern reader raise his eyebrows and point to his forehead, sighing with Obelix: 'these Romans really are crazy'. For Plinius gives an almost endless enumeration of, to our twentieth century eyes, completely incredible and inconceivable medical tips. A long series of animals, parts of animals, their products, of which faeces and urine are among the more normal, passes in revue.

These 'pharmacological' ingredients have to be used either raw, cooked or mixed with other ingredients while rotting and often they have to be extracted from the live animal. Or the animals themselves have to be cooked, fried or pulverized alive. No wonder that in a later period, apart from the possible therapeutic value of gold, pills were literally gilt in order to disguise the horrible taste or scent of the medicine (Bosman-Jelgersma, page 18). And in those days snakes enjoyed, among others, the privilege of being of great use to mankind.

Meanwhile Plinius is proud of only presenting, after a meticulous investigation, universally accepted views. This does not only say a lot about himself, but also about the rest of his contemporary, civilized world.

Consuela's therapy as described by Isabel Allende is also found in Plinius, and he reports that also scorpion stings can be treated effectively by having sexual intercourse with a woman. He warns, however, that this therapy is harmful to the woman. It is not clear to me whether Plinius means that this harmful effect would be pregnancy, which in the case of Allende is an unmistakable, but otherwise not unwholesome side-effect of this therapy.

In the following I would like to inform you about the classical ways of treating snake bites and, which is equally interesting, how one could prevent them in the older days. Moreover, I don't want to conceal from you that that your snakes constitute some valuable pharmacological ingredients, applicable to numerous diseases. Nevertheless, some centuries have passed and fortunately for us and especially for our snakes, medical science has not been sitting still.

Except where otherwise specified, all examples come from the above-mentioned part of Plinius' *Naturalis Historia*.

SNAKE CHARMERS

in ancient times some tribes lived in southern Europe, who had some strange ways of handling poisonous and dangerous animals. These were the Marsi, a people living in Italy, the Psylli from Libya and the Ophiogenes who lived near the Hellespont, so called because their ancestors were supposedly begotten by a snake (Topsell, page 22 and 46), something of which also the Pelagians, the prehistoric inhabitants of Greece, prided themselves (Zimniok, page 45).

The members of these tribes knew some magic words to combat snakes and scorpions. In addition, they had many other remedies to give some victims a quick recovery, in case prophylaxis came too late. They were immune to the bites of poisonous animals. In support of this Plinius mentions a certain Evagon, called Exagon in Topsell (page 22), an ambassador for the Ophiogenes in Rome, who served as a guinea-pig in an equally uncomplicated and pragmatic experience, the result of which was not unfavourably influenced by the absence of any laboratory circumstances; he was simply put, with nothing on, in a barrel full of snakes. It caused great surprise when it was shown that the snakes had licked him everywhere. *Quod erat demonstrandum*.

Among others the Roman historiographer Lucanus (39-65 A.D.), chronicler of the civil war between Caesar and Pompeius, enables us to get a better idea of one of these tribes of magicians, the Psylli.

Of all races inhabiting the earth, there is only one, the Psylli of Marmarica, who comes to no harm when they receive a deadly bite of snakes. Their voice has the activity of powerful herbs, their own blood is protected and keeps down all venoms, even without using charms. The circumstances in their country made it possible to live among snakes without any problems. By making a living in a place surrounded by snakes, they obtained the privilege from death to live safely (comprehend: at least when death caused by venom is concerned). They put extreme trust in their blood. When a new born baby is suspected to have the wrong blood, they test the child using a venomous aspis. When the baby doesn't hesitate to touch the snake and subsequently starts to play with the snake, only then, the Psylli are convinced of the purity of the descendant. The Psylli are not content with only their own safety, but also watch over strangers and help humanity to combat deadly monsters. They followed the Roman army; and as soon as the leader orders to pitch the camp, the Psylli started to clean the sand within the area of the camp from snakes using charms and incantations. The borders of the camp were pegged out with smoking fires in which wood crackled and resin sizzled. Spare tamarisk branches, eastern costoes, centaury from Thessalia, fennel and Italian thapsos were noisy in the flames. Furthermore, the Psylli burnt larch and southernwood, resulting in smoke of which snakes are averse from, and horns of deer deer born far outside Africa. In this way, the soldiers were protected during the night. When someone was bitten during the day and nearly died, the magic powers of the Psylli became active and a tremendous battle started between the Psyllus and the administered venom. The native starts by marking the spot of the bite; this stabilizes the venom and keeps it restricted to the wound. Then, his foaming mouth produces many charms in a continuous muttering. The seriousness of the wound forces him not to breath,

neither is there a moment of silence permitted by the death. Indeed, the venom, after penetrating the blackening marrow is cast out by magic. However, when the venom doesn't obey properly, and refuses, despite all orders, to appear, the curer bends over and licks the bloodless spot, sucks the venom and drains the limbs with his teeth, till he drags the death with a triumphant gesture from the cold body and spits it out. It is a piece of cake for the Psylli to determine by the taste of the venom the snake species, whose bite was triumphed over by the curer.
(Lucanus, IX, 890-939, pp. 571-575).

Apparently the Psylli mastered various therapies, for Topsell tells of a variant of the above. According to this source, things were done as follows: when someone was bitten by a snake, and the venom had not yet spread itself too badly about the body, it would be sufficient for a Psyllus to rub some saliva on the wound. By doing so, the pain and the poisoning were supposed to be restrained. If the situation was more serious, the Psyllus would take a gulp of water, rinse his mouth with it, spit it into a cup and give this to the sufferer to drink. In an even more serious case, when the poison had already spread through the body, the Psyllus would undress and lay on the also naked body of the patient. By means of this way of touching the poisoning was suppressed and the patient recovered completely (Topsell, page 46).

But already some contemporary scientists openly expressed their doubts about these strange practices. Cornelius Celcus, a Roman physician (\pm 30 A.D.) who wrote an encyclopedia of sciences, of which only the part about medicine has been preserved, frankly maintains that the Psylli do not possess any gift of healing those who have been bitten by snakes at all, but since they are boldly adventurous, they simply take the liberty of trying and doing things which do not appeal to others who are not daring.

Plinius himself frequently mentions the Marsi, but many times his tone and choice of words suggest that he does not have much faith in their therapies or the remedies made up by them. What is more, many times he speaks in no uncertain terms of 'deceit' and 'lies', whereas he nevertheless wants to inform his readers objectively about practices of the Marsi.

The famous Greek physician Galenus (130-201 A.D.) along with Plinius has some objections against the Marsi. He also disputes the Marsi possessing any gifts to combat snakes and he emphasizes that these are sly acts and cunning tricks to deceive the common people. Galenus explains how the Marsi catch snakes on moments when these are weak and inert and how they accustom them to food which does not have their natural preference, having them bite and chew this constantly, so that their venom gets wasted. Moreover, they let the animal bite some kind of bread made of milk and flour, in order to block their hollow fangs. And when after this they let the snake bite them, the effect is minimal, which was a miracle in the eyes of the common people (Topsell, page 47).

The medieval writer Maerlant tells us how these tribes of mysterious healers assiduously tried to create the need to appeal to them. In contrast to what Lucanus says about the Psylli's altruism, he tells us that in pursuit of profit they imported scorpions to Italy, in the hope that these animals would come up to their expectations and make many victims. This trick was unsuccessful because the scorpions died (Maerlant, book VI, vss 707-714). A prelude to our own Middle Ages, when monasteries encouraged the belief in witches and sorcerers in the hope of selling a lot of amulets and relics!