

**A Piece of the Snake in Pliny's Pharmacological Texts:
A Reinterpretation of the Snake in Roman Medicine**

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Observations

1. The “slough” verse “skin”, what is the significance?
2. Snake bites, which snakes were the cause?
3. *Anguis* verse *serpens*, what do they mean?

“...by pursuing about 2000 volumes...we have collected in 36 volumes **20,000 noteworthy facts** obtained from **100 authors** that we have explored, with a great number of other facts in addition to that were either ignored by our predecessors or have been discovered by subsequent experience...you will deem it a proof of this pride of mine that **I have prefaced these volumes with the names of my authorities.**” (Pliny *NH* 1.Pref.17, 21)

List of Applications with Snake Products

Against snake, alopecia (hair loss), amulets against sorcery, arrows, asp bite, burns, childbirth, cramps, dentition, depilatories, disease, dysentery (tenesmus) ear infections, epilepsy, erysipelas, eye diseases, eye fluxes, feverish chills, fresh wounds, gout, gums, keep away wild beasts, lice, luck in the home, mad dog bite, miscarriage, night terrors, nits, quartan fever, scrofula, sinews, snake bite, sterile women, stomach pain, sustaining health, ulcers, victory in lawsuits, vision loss/impairments, and warts.

Snakes Determined (derived from modern typologies, see Reptile Database*)

Amphisbaena (*amphisbaena*): European Blind Snake (*Xerotyphlops Vermicularis*)= *NH* 30.35.85, 30.36.110

Asp (*aspis*): Red-Spitting Cobra (*Naja Pallida*) = *NH* 28.18.65

All other asps (*aspis*): Egyptian Cobra (*Naja Haje*) or *Chersaiai* = *NH* 29.16.60, 29.17.61, 29.18.65, 29.38.119, 30.12.37, 30.30.103

Basilisk (*basilicus*): Egyptian Cobra (*Naja Haje*) = *NH* 29.19.66

Boa (*boa*): African Rock Python (*Python saba*) = *NH* 29.38.122, 30.22.69, 30.47.139

Draco/Python (*draco*): East African Sand Boa (*Eryx colubrinus*) = 8 mentions. Eg. *NH* 29.20.67

Enhydri (*enhydri*): Anatolian Viper (*Natrix Natrix*) = *NH* 30.8.21

Hydros (*hydrus*): Anatolian Viper or any snake near water (?) = *NH* 29.22.71

Viper (*vipera*): Horned Nose Viper (*Vipera ammodytes*) = 23 mentions. Eg. *NH* 28.42.153, 30.32.106

Snake/Serpent (*anguis/serpens*) = case dependent**

The Slough and the Skin

vernatio = L-S, s.v. *vernatio -onis* f. I. Lit. and II. Transf. “the slough cast off by a snake.” (29.35.111, 29.38.121, 30.8.24, 30.41.120)

membrana = L-S, s.v. *membrana -ae* f. “the skin or membrane that covers the body” IB. Esp. “the skin of slough of snakes.” (29.38.119, 30.8.25, 30.33.81)

senectus = L-S, s.v. *senectus -utis* f. “old age” II4. “The old skin, slough cast off yearly by serpents and other animals.” (13 mentions. Eg. 28.48.174, 30.19.57, 30.36.110)

pellis = L-S, s.v. *pellis -is* f. “skin, hide, whether on the body or taken off.” (39.35.11, 30.27.92, 30.47.137, 30.53.148)

cutis = L-S s.v. *cutis -is* f. “the skin” B2. “a soft coating, covering of anything, the skin, rind, surface.” (30.30.103, ref. 8.40.99)

Examples: *NH 29.38.122 membrana sive senectus vernatione eorum* “the skin or slough of them cast in the spring” (trans. Jones 1963)

Appendix: “Catalogue of Snakes” no. 55

Snake Bites

NH 28.8.40; 28.10.44; 28.18.65; 28.18.67; 28.20.70; 28.27.100; 28.42.150 (x3); 28.42.153; 28.42.154; 28.48.174

NH 29.16.60; 29.17.61; 29.18.65; 29.19.66; 29.20.67; 29.21.70; 29.22.71 (x2); 29.24.77 (x2); 29.25.78; 29.26.81; 29.26.83

Example: *NH 22.24.71 anguis venenatus est...* “a snake is venomous...” (trans. Jones 1963)
Jones 1963, 231 fn. c: there is certainly a distinction between *serpens* and *anguis*...[*anguis*]
sometimes meant a poisonous snake...

Example: *NH 29.17.63* and *29.18.65 (asp)*, *29.21.69 (viper)*

Appendix: “Catalogue of Snakes” no. 27, 28, 31

L-S, s.v. *ictus* “bite” + *serpens* = *Vipera ammodytes* or *Vipera berus*

Example: *NH 28.8.40, 28.42.150* and *29.11.47*

Appendix: “Catalogue of Snakes” no. 2, 12 and 23 (*only a sample out of 8)

Anguis and Serpens

L-S, s.v. *serpens* “a large snake, serpents or dragon”

L-S, s.v. *anguis* “a snake or serpent” I. Lit. “a snake or serpent as a hateful odious object”

Connection with *ictus* / application: keeping serpents away

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For typologies see Reptile Database <http://www.reptile-database.org>

Table 1. "Catalogue of Snakes" (adapted)

Entry	NH	English	Latin	Family	Type	Region	Illness/Ailment	Season	Part Used	Instructions	Admin. Via	Appli. User	Notes
2	28.8.40	Serpents	<i>serpentium</i>	<i>Viperidae</i>	Horned Nose Viper (<i>V. ammodytes</i>) or Common European Adder (<i>V. berus</i>)	Greece and Italy	Snake bite	Summer			application	locally	human <i>ictibus = Viper</i>
12	28.42.150	Snakes	<i>serpens</i>	<i>Viperidae</i>	Horned Nose Viper (<i>V. ammodytes</i>) or Common European Adder (<i>V. berus</i>)	Greece and Italy	Keep serpents away	Spring/Summer					human <i>ab ictu = Viper</i>
13	28.42.150	Serpents	(See above)	<i>Viperidae</i>	Horned Nose Viper (<i>V. ammodytes</i>) or Common European Adder (<i>V. berus</i>)	Greece and Italy	Keep serpents away	Spring/Summer			worn application		human
16	28.42.152	Serpents	<i>serpentes</i>		Any poisonous snake? Any posionous snake		Keep serpents away Snake bite	Spring/Summer Summer			fumigation (?) consume or application		human
23	29.11.47	Snake	<i>serpentium</i>	<i>Viperidae</i>	Horned Nose Viper (<i>V. ammodytes</i>) or Common European Adder (<i>V. berus</i>)	Greece and Italy	Snake bite	Summer			application (?)	locally	human <i>ictus = Viper</i>
25	29.16.60	Asp	<i>aspidas</i>		any type of asp?		Keep serpents away	Spring/Summer					
27	29.17.63	Asps	<i>aspidum</i>	<i>Elapidae</i>	Egyptian Cobra (<i>Naja Haje</i>) or <i>Chersaiai</i>	Egypt, Libya, Ethopia	Asp bite	Summer			consumption		adult children
28	29.18.65	Asps	<i>aspides</i>	<i>Elapidae</i>	Egyptian Cobra (<i>Naja Haje</i>) or <i>Chersaiai</i>	Egypt, Libya, Ethopia	Asp bite	Summer			consumption		human
38	29.24.77	Serpents	<i>serpentes</i>		Any poisonous snake?		Keep serpents away	Spring/Summer			fumigation		
48	29.38.11 9	Asp	<i>aspidis</i>	<i>Elapidae/ Viperidae ?</i>	Egyptian Cobra (<i>Naja Haje</i>) or <i>Chersaiai ?</i> (unclear)		Vison loss	Spring/Summer	fat and slough		application	eyes	draught animals
55	29.38.12 2	Snakes	<i>anguium</i>				Eye diseases	Spring/Summer	fat slough	X cast in Spring	application	eyes	human
83	30.30.10 3	Asp	<i>aspidis</i>	<i>Viperidae</i>	Horned Nose Viper (<i>V. ammodytes</i>) or Common European Adder (<i>V. berus</i>)	Parthia (?)	Quartan fever	Summer/Autumn	skin	1/6 denarius	consumption (?)		human

Appendix: External Sources

	Book 28	Book 29	Book 30
Authorities	M. Varro, L. Piso, Antias, Verrius, Fabianus, Cato, S. Sulpicius, Licinius, Macer, *Celsus, Masurius, Bythus of Durazzo	M. Varro, L. Piso, V. Flaccus, Antias, Nigidius, Cass. Hemina, Cicero, Plautus, *Celsus, Met. Scipio, Ovid, L. Macer, ****Caeilius (the medical writer)	M. Varro, Nigidius, M. Cicero, L. Macer
Foreign Authorities	**Sex. Niger, Democritus, Apollonius (alias the Mouse), Meletus, Artemon, Sex. Antaeus, Homer, Theoprastus, Lysimachus, Attalus, Xenocrates, Orpheus, Archelaus, Demotrius, Sotira, Lais, Elephantis, Salpe, Olympas of Thebes, Diotimus of Thebes, Iollas, Andreas, Marcio of Smyrna	**Sex. Niger, Palaephatus, Homer, Aristotle, Orpheus, Democritus, Anaxilaus	**Sex. Niger, Eudoxus, Aristotle, Hermippus, Homer, Apion, Orpheus, Democritus, Anaxilaus
Medical Authorities	Hippocrates, Aeschines, Aristotle, Methodorus of Scepsis, Hicetidas, Apelles, ***Hesiod, Biaclon, Caecilius, Bion, Anaxilaius, King Juba	Botrys, Apollodorus, Archedemus, Aristogenes, Xenocrates, Democrates, Didorus, Chrysippus, Philip, Orus, Nicander, Apollonus of Pitane	Botrys, Apollodorus, Menander, Archidemus, Aristogenes, Xenocrates, Diodorus, Chrysippus, Philippus, Orus, Nicander, Apollonius of Pitane

Notes:

* = Celsus, a medical writer, but is placed in general authorities.

** = Sex. Niger, in the text is placed under general authorities but since he is a Greek writer, he should be placed in Foreign Authorities.

*** = Hesiod, if Pliny is talking about the poet, is more than definitely in the wrong place, he would be better fitted under Foreign Authorities, like Homer.

**** = Caeilius, same as Celsus

Medical Advice with Snake By-Products from Authorities

Dioscorides	Valigus Rufus (lost to us)	Xenocrates of Aphrodisias
Olympias of Thebes (NH 28.77.253)	Cicero (NH 29.16.60)	Varro (NH 29.18.65)
Nigidius (NH 29.21.69)	Greeks (NH 29.21.70)	Parthians (NH 29.25.78, 30.30.103)
Celsus (NH 29.38.128)	Aesculapius (NH 30.22.69)	Nicander (NH 30.25.85)
Ammianus Marcellinus NH 30.36.110)	physician Antonius (Castor?) (NH 30.39.117)	
the Magi (NH 29.19.66, 26.83, 30.34.80, 27.91-2, 27.98-100)		