

A Translation of the New Edition of the *Suśrutasaṃhitā*

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Uttaratantra, adhyāya 16 (17 in the vulgate)

Literature

Survey of this chapter and the existing research on it to 2002: [HIML: IA](#), 305–306.

History of couching in India: Scott [1817](#); Breton [1826](#); Jack [1884](#); Hendley [1895](#); Elliot [1918](#); Parshwanath Shastri [1940](#); Deshpande [1999](#); [2000](#); Dagmar Wujastyk [2019](#); Leffler et al. [2020](#).

Translation

- 1 Now I shall explain the counteraction (*pratiṣedha*) of diseases located in the pupil (*drṣṭi*).
- 2 There are three curable (*sādhya*), three incurable (*asādhya*), and six mitigatable (*yāpya*) diseases located in peoples eyes. Among these, three are curable (*sādhya*). Amongst these three, the remedy (*pratīkāra*) has been stated for the one called “seeing smoke (*dhūmadarśin*)”.⁷⁸
- 3–5ab When the eye is inflamed (*vidagdha*) by bile and when it is inflamed by phlegm, one should apply the method for removing bile and phlegm, using nasal medicines (*nasya*), irrigation (*seka*), application of collyrium (*añjana*), liniment (*ālepa*), and medicines cooked in a crucible (*puṭapāka*), together with a balm (*tarpaṇa*),⁷⁹ but not cutting with a blade (*śastrakṣata*).⁸⁰
One should drink ghee (*sarpis*) prepared with the three fruits (*triphalā*) and in the first [case where the problem is bile], and prepared with turpeth (*trivṛta*) in the latter [case, of phlegm].
And ghee prepared with tilvaka (*tilvaka*) is wholesome in both cases, or else aged ghee on its own.
- 5cd–7ab In a collyrium, these four compounds (*yoga*) are beneficial in both cases:
 - ochre (*gairika*), Sind salt (*saindhava*), long pepper (*kṛṣṇā*) and the black soot (*maṣī*) from cow’s teeth;

where is cutting with a knife related to removing bile or phlegm.

maṣī burned charcoal. Find refs.

⁷⁸ This disease and its cure are described earlier (SS.6.7.39 and SS.6.10.16 ([SS 1938²](#): 609 and 614) respectively). The latter part of this verse is hard to construe and the text here may have been altered at an early period.

⁷⁹ These therapies are described in SS.6.18 ([SS 1938²](#): 633–640).

⁸⁰ Dalhaṇa interprets this as blood-letting (*sirāvedha*), which is discussed in SS.1.14 ([SS 1938²](#)).

- Cow's flesh (*gomāṃsa*), black pepper (*marica*), siris (*śirīṣa*) and red arsenic (*manahśilā*);
 - stalk (*vṛnta*) from a wood apple (*kapittha*) with honey (*madhu*);⁸¹
 - or the the fruits of the velvet bean (*svayaṃgupta*).
- 8 The physician should make a collyrium with ground up metal (*kupyaka*),⁸² Asoka tree (*aśoka*), Sal tree (*śālā*), mango (*amra*), beautyberry (*priyaṃgu*), Indian lotus (*nalina*), blue lotus (*utpala*), together with hareṇu (*hareṇu*), emblic (*āmalaka*), myrobalan (*pathyā*), long pepper (*pippali*). It should be combined with ghee and honey (*kṣaudra*).
- 9–10 Also, when bile and phlegm have developed, the physician should apply hareṇu (*hareṇu*) with the expressed juice (*svarasa*) of the flowers from mango (*amra*) and Jambu (*jambū*) trees. Then this collyrium, matured (*vipakva*) with ghee and honey (*kṣaudra*), should then be applied.
- 10–11ab Filaments (*kiñjalka*) of Indian lotus (*nalina*) and blue lotus (*utpala*), with ochre (*gairika*), and the juice of cow-dung (*gośakṛt*) are a collyrium in the form of a pill (*guḍikā*). This is good for both day and night blindness.
- 11cd–12ab Elixir-salve (*rasāñjana*), honey (*kṣaudra*), ghee, scrambleberry (*tālīśa*), together with gold and ochre, with the juice of cow-dung (*gośakṛt*) are for an eye afflicted with bile.
- 12cd–13 Alternatively, wise physician should first grind together elixir-salve (*śīta*) and stibnite (*sauvīraka*), infused (*bhāvita*) with the blood of birds and animals (*rasa*).⁸³ Then he mixes it with the bile of a tortoise or with extract of rohu carp (*rauhita*). It should always be used with powdered collyrium to quell the bile.
- 14 Thus, a collyrium of white teak (*kārśmarī*) flowers, liquorice (*madhuka*), tree turmeric (*dārvī*), lodh tree (*lodhra*) and elixir salve (*rasāñjana*) is always good as a collyrium in this case.
- 15 Alternatively, for those who cannot see during the day, this pill (*guḍikā*), with sandalwood, is recommended: salt (*nadīja*), conch shell and the

81 wood apple (*kapittha*) in this verse is ablative singular or accusative plural, neither of which construe obviously.

82 A metal other than gold or silver, according to V. Jośī and N. H. Jośī 1968: 1.217. Perhaps lead, which is used in making contemporary collyrium.

83 This is Ḍaḷhaṇa's preferred interpretation of *rasa* "juice" in this context. He also notes that some take elixir-salve (*śīta*) to be camphor.

- three spices, collyrium, realgar (*manaḥśilā*), the two turmeric (*rajana*)⁸⁴ and liver extract (*yakṛdrasa*).⁸⁵
- 16 One should grind up kohl (*srotoja*),⁸⁶ and Sind salt (*saindhava*) and long pepper and also hareṇu (*hareṇu*). Such wicks with goats urine are good in a collyrium for night blindness (*kṣaṇadāndhya*).
- 17–18ab Alternatively, in such a case, grind together Indian sarsaparilla (*kālā-nusāriva*)⁸⁷ long pepper, dried ginger (*nāgara*) and honey, the leaf of the scramberry (*tālīśapatra*), the two turmeric (*rajana*), a conch shell and liver extract (*yakṛdrasa*). Then shade-dried wicks take away illness (*ruj*).
- 18cd–19ab Wicks made of red arsenic (*manaḥśilā*), chebulic myrobalan (*abhayā*), the three spices (*vyoṣa*). Indian sarsaparilla (*sāriva*), cuttlefish bone (*samudraphena*), combined with goat's milk are good.
- 19cd–21ab One should cook a honey collyrium (*kṣaudrāñjana*) either in the juices of cow's urine (*gomūtra*), and bile, spirits (*madirā*), liver (*yakṛt*), and emblic (*dhātṛī*) or else in the juice of the liver (*yakṛt*) of something different, or else with the extract of the three fruits (*triphalā*). One of these should be mixed with cow urine, ghee and cuttle fish (*aṇṇavamala*)⁸⁸ with long pepper, honey and box myrtle (*kaṭṭphala*). It is placed in sea salt and stored in a bamboo tube.
- 21cd–22 One should cook the liver of a sheep, the ghee of a goat, with long pepper and Sindh salt, honey and the juice of emblics. Then one should store it properly in a catechu box. Prepared thus, the honey collyrium is good.
- 23 Alternatively, a collyrium that is hareṇu (*hareṇu*) mixed with long pepper (*māgadhi*), the bone and the marrow of a goat, cardamom (*elā*) and

84 Turmeric (*Curcuma longa* Linn.) and tree turmeric (*Berberis aristata* DC). The term *rajana* is unusual; the normal term is *rajanī*. *Rajana* occurs in *Suśrutanighaṇṭu* 158 in the sense of *Ferula asafoetida*, Linn.

85 This verse appears as no. 27 in the vulgate.

86 Glossed by Ḍalhaṇa as a kind of collyrium. Cf. Nadkarni 1954: 2.M13 and P. V. Sharma 1982: 197–198

87 There are two forms of *sārivā* mentioned widely in Āyurvedic literature, the white and the black. Ideas on the identity of the black form are particularly fluid. See Sivarajan and Balachandran (1994: 434–438) for a clear discussion.

88 At SS 6.12.31, Ḍalhaṇa glossed *aṇṇavamala* as cuttlefish bone (*samudraphena*). It may be worth considering whether the unusual term *aṇṇavamala* “ocean-filth” might refer to ambergris.

- liver, together with liver extract, is good for eyes afflicted by phlegm.⁸⁹
- 24 Over a fire, one should cook the liver (*yakṛt*) of a monitor lizard (*godhā*) prepared with entrails (*antra*) and stuffed with long pepper (*māgadhi*). As is well known, liver (*yakṛt*) which is used (*niṣevita*) with collyrium certainly destroys night blindness.
- 25 After preparing both a spleen (*plīhan*) and a liver on a spit, one should eat them both with ghee and oil.⁹⁰
- 25cd–26ab As is well known, there are six diseases that can be alleviated (*yāpya*); in those cases (*tatra*) one should release the blood by bloodletting. And for the sake of wellbeing one should also purge using aged ghee combined (*upahita*) with purgative aids (*aṅga*).
- 26cd–27 When an eye-disease is caused by wind (*pavanodbhava*) they say that castor oil (*pañcāṅgulataila*) mixed with milk is good.⁹¹ In the case of diseases of blood (*śonita*) and bile (*pitta*), one should drink ghee with the three fruits; it is particularly cleansing.⁹² In the case of phlegm, a purgative by means of turpeth (*trivṛt*) is recommended. In the case of all three humours, sandal (*sugandhi*) in oil is prepared with it (turpeth).⁹³
- 28 In cases of partial blindness (*timira*), aged ghee is recommended. It is good if it is kept in an iron vessel.
- 28cd–29ab One should know that ghee with the three mylobalans is always good, and it is made with what is called periploca of the woods (*meṣaviṣāṇa*). A man who is suffering from partial blindness should lick the finely-

89 On the identities of *elā* and *hareṇu* Watt (1908: 511 ff) described the former as “true” or “lesser” or “Malabar” cardamom, *Elettaria cardamomum*, Maton & White, in contrast to the “greater” cardamom is *Amomum subulatum* (that he discusses on p. 65) that is commonly used as an inferior substitute for *E. cardamomum*. Singh and Chuneekar (1972: 467 f) provided an interesting discussion of *hareṇu*, noting that the term refers to two substances, first the *satīna* pulse (*Pisum sativum*, Linn.), and second an unknown fruit such as perhaps a *Vitex*. They noted, “None of the text commentators have attempted to disclose the nature of its source plant,” although Ḍalhaṇa described it as aromatic and identical to *reṇukā* (SS.ci.2.75).

90 We read the locative as if an instrumental; if the locative were intended then it would be the spit that would be coated with oil and ghee.

91 Ḍalhaṇa says that the unexpressed topic of this recipe is partial blindness (*timira*).

92 Blood-bile (*śonita-pitta*, *rakta-pitta*) is a widely-recognized disease in ayurveda, but the compound here is definitely dual, which rules out that interpretation. One would expect blood-bile because the previous verse

93 The expression “the fragrant one in oil (*tailasugandhi*)” is puzzling. The word *sugandhi* has different referents in the *Nighaṇṭu* literature but is not common as a noun in the extant literature. “Sandal” is just one of its possible meanings.

- ground three fruits mixed with ghee off his hand (*sapāṇa*).⁹⁴
- 29cd Alternatively, someone afflicted by phlegm should apply them (the three fruits) mixed with oil and steeped (*pragāḍha*) in honey.
- 30 The very best oil, well-cooked with a decoction of cow-dung, is good in cases of partial blindness, taken as an errhine.
In cases caused by bile, ghee by itself is good, as is oil when it arises from wind and blood.
- 31 And in the case of wind one should apply turpeth (*trivṛt*) based on strong mallow (*atibalā*), and country mallow (*balā*) in an errhine (*nasya*).⁹⁵
Ghee which has been extracted from milk cooked with the meat of aquatic creatures and those from marshlands should be prescribed.
- 32 †An enclosed roasting (*puṭākhyā*) with Sindh salt and the product of the meat of a carnivore (*kravyabhuj*) and a deer (*eṇa*), is combined with honey and ghee.⁹⁶
Fat (*vasā*) from a horse, a vulture, a snake, and a cock (*tāmracūḍa*), combined with mahua (*madhūka*) is always good in a collyrium.†⁹⁷
- 33 Having prepared (*niṣevita*) a collyrium made of kohl (*srotas*) and gradually combine it with juices (*rasa*), milk and ghee.⁹⁸
For thirty days, this collyrium is put in the mouth of a black snake that

94 “Off his hand” translates the adverbial *sapāṇam*, an unusual word. Ḍalhaṇa reproduces a reading close to the Nepalese recension but says that Jejjāta rejects it and so he also does (SS 1938: 627).

95 “Based on” translates *-āśrita* “depending on” which does not construe easily here. The vulgate has *śṛta* “cooked” which makes easier sense but is not supported by the Nepalese MSS.

96 Ḍalhaṇa notes (SS 1938²: 628a) that *puṭāhvaṇya* (see verse 35 below) is a synonym for *puṭapāka*, and that the process is described in the *Kriyākālpa* chapter, i.e., SS.6.18.33–38 (SS 1938²: 635). On the *puṭa* process in the *Suśrutasaṃhitā*, which is earlier and different than that of *rasaśāstra* literature, see the discussion by Dagmar Wujastyk (2019: 83):

The term ‘enclosed roasting’ (*puṭapāka*) does occur in the *Suśrutasaṃhitā* in the context of eye treatments, but designates a method of obtaining juice from substances by wrapping them in leaves pasted with earth and cooking the bolus on charcoal to finally extract a juice.

97 This verse contain irresolvable difficulties. There are no significant variants in the Nepalese MS transmission, but the text is ungrammatical. The vulgate reads substantially differently but we have nevertheless made some emendations in line with it and read the verse as two sentences.

98 Ḍalhaṇa specifies that the juices are meat soups of various animals (SS 1938²: 628).

- is covered with kuśa grass (*kuśa*).
- 34 Next, a collyrium that is milk containing long pepper (*māgadhi*), lye (*kṣāraka*) and Sindh salt (*saindhava*) that has been repeatedly prepared with the mouth of a black snake, is good in the case of bloodshot blindness (*rāgin timira*).⁹⁹
- 35 They say that ghee may be produced from that and combined with sweet herbs is good as an errhine for eye-diseases caused by bile. And here, a balm (*tarpaṇa*) is good that is a combination that is the flesh of wild animals taken hot (*puṭāhvaya*).¹⁰⁰
- 36 And realgar (*manaḥśilā*) mixed with elixir salve (*rasāñjana*) and honey is a liquid collyrium (*dravāñjana*) which is, in this case, combined with mahua (*madhūka*).¹⁰¹
- Alternatively, experts on this say that finely ground blue vitriol (*tuttha*) extracted from a gold mine is the “same collyrium (*samāñjana*)”.¹⁰²
- 37 Conch mixed with equal parts of sheep’s horn and stibnite (*añjana*) removes the impurity of the glassy opacity (*kāca*) because of the application of collyrium (*añjana*).¹⁰³
- The extracts (*rasa*) produced from aflame of the forest (*palāśa*), Rohīta tree (*rohīta*),¹⁰⁴ mahua (*madhūka*), ground with the supernatant layer (*agra*) of the spirits (*madira*) is applied.
- 38 Alternatively, one should cook an errhine with cuscus grass (*uśīra*), lodh tree (*lodhra*), the three fruits (*triphalā*), beauty berry (*priyaṅgu*) to pacify eye diseases caused by phlegm.¹⁰⁵
- One should apply smoke of the bark of embelia (*vidaṅga*), velvet leaf

99 Ḍalhaṇa describes this blindness as a type of *kāca* disease caused by wind (SS 1938: 628). The expression “bloodshot blindness” is an attempt to capture the idea of a blind eye that is dyed or coloured (not colour-blindness). This verse is quite different from the vulgate and also syntactically challenging.

100 The expression taken hot (*puṭāhvaya*) is a guess.

101 The expression liquid collyrium (*dravāñjana*) is only known from Ḍalhaṇa’s comments on SS.6.17.11ab (SS 1938²: 626). The recipe in the present collyrium is different from that discussed by Ḍalhaṇa.

102 The expression “same collyrium (*samāñjana*)” is a hapax legomenon glossed inexplicably by Ḍalhaṇa as “a collyrium with an equal amount of fermented barley” (*tulya-sauvīrāñjana*) (SS 1938²: 628).

103 The ablative “from collyrium” is hard to construe, but Ḍalhaṇa uses this term and phrase in his commentary on SS 6.17.41ab (SS 1938²: 629).

104 Probably *Soymida febrifuga* A. Juss.

105 Ḍalhaṇa invokes a general rule (*paribhāṣā*) to indicate that this mixture should be cooked with sesame oil.

- (*pāthā*), white siris (*kinihī*), and desert date (*iṅgudī*); and cuscus grass (*uśīra*) alone.
- 39 A ghee that is cooked (*bhāvita*) from a decoction of a non-flowering tree (*vanaspati*)¹⁰⁶ as well as turmeric (*haridrā*) and spikenard (*nalada*) is good in a balm (*tarpaṇa*).
Alternatively, one may have an enclosed roasting (*puṭapāka*) done with arid-land animals (*jāṅgala*)¹⁰⁷ and a plentiful amount of long pepper (*māgadha*), Sindh salt and honey.
- 40 A treatment (*kriyā*) with realgar (*manaḥśilā*), the three spices, conch, honey, along with Sindh salt, green vitriol (*kāsīsa*) and elixir salve (*rasāñjana*).¹⁰⁸
They say that an elixir salve (*rasāñjana*) combined with myrobalans, treacle and dried ginger is good.¹⁰⁹
- 41 Alternatively, a collyrium that has been prepared many times in the eight types of urine¹¹⁰ is put into water with the three fruits. Having stored it in the mouth of a nocturnal creature (*niśācara*)¹¹¹ one should place it in a conch (*salilotthita*) for two months.¹¹²
- 42 One should apply that collyrium together with the flowers of mahua (*madhūka*) and horseradish tree (*śigru*) when [the disease] is caused by all [the humours].
But alternatively, all treatments apply when blood is the cause. The procedure that removes bile is good when there is blue dot cataract (*mlāyin*).¹¹³
- 43 For one who has a humour, the physician should consider the rule in

find ref.

Check out these refs.

106These are fig trees. The *Sauśrutaniḥaṇṭu* (252) specifies the Uḍumbara. Cf. the classification in CS.1.1.71–72, 1.8, *et passim*.

107On this term, see SS.1.35.42 (SS 1938²:157) and the discussion by Zimmermann (1999: 25–31).

108Ḍalhaṇa glosses treatment (*kriyā*) specifically as inspissation (*rasakriyā*) (SS 1938²: 629).

109We emend *hite* to *hitam*, against the MSS.

110See SS *mūtravarga*

111 Ḍalhaṇa glosses nocturnal creature (*niśācara*) as “vulture,” although elsewhere in the SS it is more commonly interpreted as a spirit or demon. In the present context, following verses 33 and 34, it is probably a snake.

112 We interpret “water-born (*salilotthita*)” as “conch” in line with *jalodbhava*, but the term is uncertain.

113 The vulgate follows Ḍalhaṇa in glossing *mlāyin* as *parimlāya*. The description of this condition at SS.6.7.27–28 appears to refer to “blue dot” or “cerulean” cataract. √*mlai* derivatives can mean “dark” or “black.”), which is normally a different ailment.

- all humoral cases and then smear the ointment on the face.¹¹⁴
 The treatment that is good for removing watery eye (*syanda*) should be properly applied in all these humoral cases, according to the individual.¹¹⁵
- 44 The physician should not employ substances in errhines etc., when the humours intensify, and also when disease spreads. And further, in the *Kalpa*, there is a good deal more said about collyriums, and that should be considered and then applied.¹¹⁶
- 45 Someone who uses matured ghee, the three fruits, wild asparagus (*śa-tāvarī*), as well as mung beans (*mudga*), emblic and barley has nothing to fear from cases of severe blindness (*timira*).
- 46 Blindness is dispelled by milk prepared with wild asparagus or in emblics, or again cooked barley (*yavaudana*) followed by the water of three fruits with plenty of ghee.
- 47 When there is bloodshot blindness (*rāgiṇi timire*), the wise physician should not cut a vein. A humour injured (*utpīḍita*) by the instrument rapidly destroys vision.
- 48 Non-bloodshot blindness (*araga timira*) in the first layer (*paṭala*) is treatable. And bloodshot blindness (*rāgiṇi timire*) in the second layer, with difficulty. And in the third layer it is mitigable (*yāpya*).
- 49 I shall explain the therapy for success when there is a cataract (*liṅga-nāśa*) caused by phlegm. It may be white, like a full moon, an umbrella, a pearl (*muktā*) or a spiral (*āvarta*).
- 50 Or it may be uneven, thin in the middle, streaked or have excessive shine (*prabha*). A humour (*doṣa*) in the pupil may be characterized as being painful or having blood.¹¹⁷
- 51–52 At a time that is neither too hot or too cold, the patient who has been oiled and sweated is restrained and seated, looking symmetrically at his own nose.
 The wise physician should separate (*muktvā*) two white sections from

¹¹⁴ The vulgate edition omits part of this verse (ab) combining earlier and later passages.

¹¹⁵ The term watery eye (*syanda*) refers to the specific disease *abhiṣyanda*. See SS.6.6.5, 1.46.51, etc.

¹¹⁶ Ḍalhaṇa notes that *Kalpa* means the Uttaratāntra adhyāya 18 (SS 1938²: 633 ff).

¹¹⁷ In the vulgate, and in parallel passages in the AS, the reading “it may be (*bhavet*)” is replaced with the negative “if, then not (*na ced*)” (cf. AS utt.17.1–3 (AS 1980: 712)). These characteristics are then read as conditions that preclude surgery; for the Nepalese recension, they are simply descriptions of the appearance of a cataract.

the black part (*kṛṣṇa*) and from the outer corner of the eye (*apāṅga*). Having pīḍ- (*pressed*) properly into the eye,¹¹⁸ at the naturally occurring (*daivakṛte*) hole (*chidra*) with the probe (*śalākā*) made of copper or iron, with a tip like a barley-corn that is held by a steady hand with the middle finger, forefinger and thumb, the left one with the right hand and the other one contrariwise.

When the piercing is done, there is the simultaneous issue of a drop of liquid and a sound.¹¹⁹

- 55 The expert should moisten the exact place of piercing with a woman's breast-milk. Then he should scratch the circuit of the pupil (*drṣṭimanḍala*) with the tip of the probe (*śalākā*).¹²⁰
- 56 Without injuring, gently pushing the phlegm in the circuit of the pupil against the nose, he should remove it by means of sniffing (*ucchiṅgana*).¹²¹
- 57 Whether the humour is solid (*styāna*) or liquid (*cala*), one should apply sweating to the eye externally, with leaves (*bhaṅga*) that remove wind, after fixing the needle (*sūcī*) properly.¹²²
- 58 But if the humour cannot be destroyed or if it comes back, one should apply the piercing (*vyadha*) once again, with appropriate oils and so on.
- 59 Now the pupil (*drṣṭi*) shines like the sun (*hari*) in a cloudless sky; then, when objects become visible, one may slowly remove the probe (*śalākā*).¹²³
- 60 Having smeared ghee on the eye, one should cover it with a bandage.

118 We understand the locative *nayane* as the place of pressing; other interpreters take it as an accusative dual. The idea is that the eye is held steady by the surgeon.

119 Ḍaḥaṇa interprets simultaneous (*samyak*) rather as "proper," referring to the proper kind of incision.

120 The anatomy of the eye is described in SS 6.1.14–16 (SS 1938²: 596) The disks or *maṇḍalas* are the circuits or disks of the eye.

121 Ḍaḥaṇa describes sniffing (*ucchiṅgana*) at SS 6.19.8 (SS 1938²: 641), clearly intending inward sniffing.

122 We interpret *bhaṅga* as leaves, following the usage elsewhere in this sthāna SS 4.32.9, 6.11.5 (SS 1938²: 513, 614) where *bhaṅga* means shoots (*pallava*). A similar procedure is described at AS 6.17.25 (AS 1980: 716a), where sweating of the eye is done by means of the leaves of a castor-oil plant.

123 There are many problems with the MS readings and interpretation of this half-verse. We have inferred "sky" and emended from "free from the point (*agramukta*)" to "free from clouds (*abhramukta*)". The latter meaning is supported (in different words) by the vulgate and occurs elsewhere in Sanskrit literature.

- Then, he must lie down supine in a house free from disturbances.¹²⁴
- 61 At that time, he should not belch, cough, sneeze, spit or shiver. Afterwards there should be restrictions (*yantraṇā*) as in the case of someone who has drunk oil.¹²⁵
- 62 Every three days one should wash it with decoctions (*kaṣāya*) that remove wind. After three days, one should sweat the eye externally because of the danger of wind.
- 63 Having restrained himself in this way for ten days he should thereafter take a beneficial regimen (*karma*) that clears the pupil (*dṛṣṭi*) and also he should take light food in measure.

[Complications]

- 64 When there is a misshapen eyeball (*vilocana*), the eye may fill because of the release of blood from a vein.¹²⁶
A hard probe leads to shooting pain (*śūla*), a thin to unsteadiness of the humours (*doṣapariplava*),¹²⁷
- 65 a thick-tipped probe leads to a large wound, and a sharp one may cause harm in many ways; a very irregular one may cause a discharge of water, a rigid (*sthirā*) one brings about a loss of function (*kriyāsaṅga*).¹²⁸
- 66 Therefore, one should make a good probe that is free from these defects.

[Characteristics of the probe]

The probe should be eight finger-breadths long and in the middle it is wrapped with thread and is as thick as a thumb joint. It is shaped like

124Dalhaṇa explains disturbances specifically as dust, smoke, drafts and sunlight SS 6.17.67 (SS 1938²: 631a).

125Dalhaṇa glosses “restrictions (*yantraṇā*)” as having a controlled diet and the other restrictions appropriate to someone who is taking oil as a preparation before further therapy (SS 6.17.68 (SS 1938²: 631)). These restrictions are also described at SS 6.18.28 (SS 1938²: 635) and Ah 1.16.25cd (Ah 1902: 249).

126The condition of “misshapen eye” is referred to briefly in SS 6.61.9 (SS 1938²: 800), where Dalhaṇa glosses it as “bent brow and eye (*vakrabhrūnetra*).” The vulgate’s reading of “with blood (*śonitena*)” is easier to construe.

127There is a medically significant difference here from the vulgate, which reads “a rough (*khara*) probe” not a “thin” probe.

128This translation of loss of function (*kriyāsaṅga*) is given on the basis of Dalhaṇa’s gloss of *kriyāsaṅgakarī* as “causing the destruction of actions such as moving (*gamanādikriyāvīnāśakārī*)” at SS 3.8.19 (SS 1938²: 382).

- a bud at both ends (*vaktra*).
- 67 A commendable probe should be made of silver, iron or gold (*śātaku-mbhī*).¹²⁹

[Complications]

- Redness, swelling, lumps, driness (*coṣa*), bubbling (*budbuda*),¹³⁰ pigs' eye (*sūkarākṣitā*),¹³¹ irritation (*adhimantha*), etc. and other diseases arise from faults in the piercing,
- 69–70 or even from bad behaviour. One should treat them each accordingly. Listen to me once again about compounds for painful red eyes. Red chalk (*gairikaḥ*), Indian sarsaparilla (*śārivā*), panic grass (*dūrvā*), and ghee ground with barley.
- 71 This face ointment is to be used for quelling pain and redness. Or else it may be taken combined with the juice of citron (*mātuluṅga*) with sesame gently fried, mixed with white mustard (*siddhārthaka*).¹³² This is immediately beneficial when someone is looking for relief.
- 72 A paste with *Holostemma* (*payasyā*),¹³³ Indian sarsaparilla (*śārivā*), cassia cinnamon (*patra*), Indian madder (*mañjiṣṭhā*), and liquorice (*madhukair*) stirred with goat's milk, pleasantly warmed, is said to be healthy.¹³⁴
- 73 Alternatively, it can be made in this way with Himalayan cedar, Himalayan cherry (*padmaka*) and dried ginger. Or, in the same way, with grapes, liquorice and the Lodh tree mixed with Sindh salt.

129The vulgate reads “copper (*tāmra*)” in place of “silver.”

130Ḍalhaṇa glosses “bubbling (*budbuda*)” as “prolapse (*māṃsanirgama*) that looks like bubbles.”

131The expression “pigs' eye” appears to be a *hapax*. It is glossed as “downward vision (*adhodrṣṭitva*)” by Ḍalhaṇa.

132On the adverbial use of gently (*mṛdu*), see Gombrich 1979.

133The identity of *payasyā* is debated (Singh and Chunekar 1972: 538), and was already in doubt at the time of Ḍalhaṇa but likely candidates may be those suggested by Ḍalhaṇa, who suggests either *arkapuṣpī* or *kṣīrakākolī*, that may be *Holostemma adakodien* Schult. and *Leptadenia reticulata* (Retz.) Wight & Arn. (Sivarajan and Balachandran 1994: 195–196). The *Sauśrutaniḥaṇṭu* glosses it as *kṣīrikā* or *arkapuṣpikā* (Suvedī and Tivārī 2000: v. 307).

134The expression “stirred with goat's milk (*ajākṣīrārdita*)” is difficult. It may be connected with the rare root *ard* documented by Whitney (1885: 15). Cf. *√ard gatau* (*Dhātupāṭha* 1.56).

- 74 Alternatively, goats' milk with the Lodh tree, Sindh salt, red grapes and liquorice, cooked, should be used in irrigation because it removes pain and redness.
- 75 Having cooked it with liquorice, water-lily, and costus, mixed with grapes (*drākṣā*), lac (*lākṣā*), white sugar (*sītā*), with wild asparagus, Hare Foot Uraria (*pr̥thakparṇī*),¹³⁵ nutgrass (*mustā*), liquorice, Himalayan cherry (*padmaka*), and Sindh salts, one should apply it [irrigation] gently warm.
- 76cd–77ab Ghee that has been cooked in four times the amount of milk that has itself been cooked with drugs that destroy wind.¹³⁶ This has an admixture of cottony jujube (*kākolī*) etc., should be prescribed in all treatments.¹³⁷
- 77cd–78ab If pain does not end in this way, one should administer blood-letting to the vein of someone who has previously been oiled and sweated. Then the wise physician should apply cauterization in the advised manner.¹³⁸
- 78cd–80ab Now listen to two excellent collyriums for making the pupils clear. After grinding the flowers of periploca of the woods (*meṣaśṛṅga*) and siris (*śirīṣa*) and axelwood (*dhava*)

¹³⁵Suvedī and Tivārī 2000: 18.

¹³⁶Ḍalhaṇa mentions that these drugs include Deodar (*bhadrādāru*) and other wind-destroying drugs. The *vātasamśamana* group is listed in *Suśrutasaṃhitā sūtrasthāna* 1.39.7.

¹³⁷Ḍalhaṇa notes that this would include errhines, ointments, etc.

¹³⁸The vulgate reads *vāpi* for *cāpi*, so Ḍalhaṇa sees blood-letting and cautery as alternatives, not a sequence of treatments. Ḍalhaṇa lists the places that cauterization may be applied, such as the brow, forehead, etc.

Abbreviations

Ah1902	Kuṁṭe, Ananta Moreśvara and Navare, Kṛṣṇaśāstrī Rāmacandra (1902) (eds.), श्रीमद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, सूत्र-शारीर-निदान-चिकित्सा-कल्प-उत्तरस्थानविभक्तम् श्रीमदरुणदत्तप्रणीतया सर्वाङ्गसुन्दर्याख्यया व्याख्यया समलंकृतम् (Kṛṣṇadāsa Āyurveda Sīrīja, 3; Mumbayyām: Nirṇaya-sāgara Press).
AS 1980	Āṭhavale, Anaṁta Dāmodara (1980) (ed.), <i>Aṣṭāṅgasan̄grahaḥ. Śrīmad Vṛddhāvāgbhaṭaviracitaḥ Induvyākhyāsahitaḥ</i> (Pune: Maheśa Anaṁta Āṭhavale, Śrīmad Ātreya Prakāśanam), ark:/13960/t9773bb9z .
Bhela 1921	Mookerjee, Ashutosh and Ananta Krishna Shastri, Vedantabisharad (1921) (eds.), <i>The Bhela Samhita. Sanskrit Text</i> (Calcutta: University of Calcutta), ark:/13960/t3sv3157j ; Based on two copies made of the Thanjavur codex unicus (MS Thanjavur TMSSML 10773, Burnell 1880: 63–4, P. P. S. Sastri 1933: #11085).
Bhela 2000	Krishnamurthy, K. H. (2000), <i>Bhela-saṁhitā. Text with English Translation, Commentary and Critical Notes</i> (Haridas Ayurveda Series, 8; Varanasi: Chaukhambha Visvabharati).
HIML	Meulenbeld, Gerrit Jan (1999–2002), <i>A History of Indian Medical Literature</i> , 5 vols. (Groningen: E. Forsten), ISBN: 9069801248.
NCC	Raghavan, V. et al. (1949–), <i>New Catalogus Catalogorum, an Alphabetical Register of Sanskrit and Allied Works and Authors</i> , 39 vols. (Madras University Sanskrit Series; Madras: University of Madras); v.1: revised edition, 1968.

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- SS 1938 Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (1938) (eds.), श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (3rd edn., Bombay: Nirṇayasāgara Press); [HIML](#): IB, 313 edition cc.
- SS 1938² Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (2004) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता, श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता (Vārāṇasī: Caukhambhā Kṛṣṇadāsa Akādamī); Reprint of the third, 1938 edition (SS 1938), with changed pagination.
- SS₁₉₁₅ Ācārya, Yādavaśarma Trivikrama (1915) (ed.), सुश्रुतसंहिता, सुश्रुतेन विरचिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लसिता, आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता =

The Sushrutasamhita of Sushruta, the Nibandha-sangraha Commentary of Shri Dalhaṇāchārya (Mumbayyām: Nirṇayasāgaramudrāyantrālaye), [ark :/ 13960 / t3sv0mt50](https://nirayam.org/ark:/13960/t3sv0mt50), accessed 29/07/2020; [HIML](https://nirayam.org/HIML): IB, 312 edition *v.

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