A Translation of the New Edition of the Suśrutasaṃhitā Jason Birch Dominik Wujastyk Andrey Kleban Draft of 18th Fol © Jason Birch

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Abstract

The Suśruta Project is producing a new Sanskrit text edition of the Su-śrutasaṃhitā based on the early Nepalese manuscripts. As we gradually transcribe and edit the manuscripts, we are producing this new translation of the classic work.

 $^{\,}$ 1 $\,$ MS Kathmandu KL 699, MS Kathmandu NAK 1-1079, and MS Kathmandu NAK 5-333.

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Kalpasthāna, adhyāya 2

Introduction

This section begins with several lists of poisonous plants. The Sanskrit names for these plants are mostly not standard or familiar from anywhere in Sanskrit or ethnobotanical literature. It remains a historical puzzle why these particular names are so difficult to interpret. However, we are not the first to encounter these difficulties. In the twelfth century, the learned commentator on the text, Dalhaṇa, remarked,

In spite of having made the greatest effort, it has been impossible to identify these plants. In the Himalayan regions, Kirātas and Śabaras are able to identify them.¹⁰⁰

Dalhaṇa also recorded variant readings of these poison names from the manuscripts that he consulted of the lost commentary of Gayadāsa (fl. c. ce 1000). The identities of these poisons have been in doubt for at least a thousand years. Identifications have in many cases been equally impossible for us today.

Translation

- 1 And now I shall explain what should be known about stationary poisons. 102
- 3 It is said that there are two kinds of poisons, stationary (*sthāvara*) and mobile (*jaṅgama*). The former dwells in ten sites, the latter in sixteen places.
- 4 Traditionally, the ten are: root, leaf, fruit, flower, bark, milky sap $(k \cdot \bar{s} ira)$, pith $(s \bar{a} ra)$, resin $(n iry \bar{a} sa)$, the elements $(d h \bar{a} tu)$, and the tuber.
- 5 In that context,
 - the eight root-poisons are:

100 After *Suśrutasaṃhitā, kalpasthāna* 2.5 (Su 1938: 564). From the view of Sanskrit authors, Kirāṭas and Śabaras were tribal peoples. The eleventh-century author Bhikṣu Govinda, however, cast his treatise as a dialogue with a Kirāṭa king called Madana

Expected
(Pillay
2010):
Croton
tiglium,
L. = Naepala, Jayapala, kanakaphala,
titteriphala
(NL #720);
Calotropis
spp.;
Citrullus
colocynthus (colocynth);
Ricinus
communis
(castor);

- 1. liquorice (*klītaka*)ⁱ,¹⁰³
- 2. sweet-scented oleander (aśvamāraka)ⁱⁱ, ¹⁰⁴
- 3. jequirity $(gu\tilde{n}j\bar{a})^{iii}$, ¹⁰⁵
- 4. aconite (subhangurā) iv, 106
- 5. *karaṭā*,¹⁰⁷ and ending with
- 6. leadwort (vidyutśikhā \rightarrow agni- or rakta-śikhā?) v 108
- 7. 'endless' (ananta)vi, and
- 8. vijayā,¹⁰⁹

who was a master of the alchemical art (HIML: IIA, 620).

- 101 See Wujastyk 2003: 80–81.
- 102 No reference is made to Dhanvantari (see Birch, Wujastyk, Klebanov, Parameswaran, et al. 2021). "Stationary" here is a term contrasted with "moving," and signifies plants as opposed to animals and insects.
- 103 Licorice eaten in excess can be poisonous.
- 104 The roots of sweet-scented oleander are highly toxic, as are most parts of the plant.
- 105 Jequirity does indeed contain a dangerous toxin called Abrin in its seeds and to a lesser extent in its leaves, but apparently not in its roots or bulb. Abrin is not harmful if eaten, but an infusion of the bruised (not boiled) seeds injected or rubbed in the eyes can be fatal (NK:#6). The dose can be quite small.
- 106 The plant is usually called just bhangurā without the prefix su-"good."
- This poisonous root cannot at present be identified. Similar-sounding candidates include <code>karkaṭaka</code>, <code>karaghāṭa</code> (emetic nut), and <code>karahāṭa</code>, but since this is a prose passage, there would be no reason to alter the word to fit a metre. Monier-Williams et al. (MW: 255) cite an unknown lexical source that equates <code>karaṭa</code> (mn.) with safflower (<code>Carthamus tinctorius</code>, L.), but this plant does not have a poisonous root.
- 108 The roots of both rose and white leadwort are very toxic.
- 109 Meulenbeld (1989: 61, n. 3) argued that our text read a masculine or neuter noun *vijaya*, which never signifies cannabis. However, unlike the vulgate, the unanimous readings of the Nepalese manuscripts give feminine *vijayā*. Nevertheless, even this form only started to signify *Cannabis sativa* L. after the end of the first millennium (Meulenbeld 1989; Wujastyk 2002; McHugh 2021). The *Sauśrutanighaṇṭu* gives a number of synonyms for *vijayā*, almost none of which have any poisonous parts (Suvedī and Tīvārī 2000: 5.77, 10.143). But one of them, *viṣāṇī* (also *meṣaśṛṅgī*), is sometimes equated with *Dolichandrone falcata* (*DC.*) *Seemann* (Sivarajan and Balachandran 1994: 518), a plant used as an abortifacient and fish poison (Nadkarni 1982a: #862). This identification is tenuous.

i Glycyrrhiza glabra, L.; see AVS 3.84, NK #1136

ii Nerium oleander, L.; see ADPS 223, NK #1709

iii Abrus precatorius, L.; see AVS 1.10, NK #6, Potter 168

iv \rightarrow bhangura = ativiṣā? Aconitum ferox, Wall. ex Ser.; see NK #38

v Plumbago zeylanica (or rosea?), L.; see NK #1966, 1967

vi ?; see ?

- the leaf-poisons include:
 - 'poison-leaf' (viṣapatrikā)^{vii},
 - 'drum-giver' (lambaradā) viii,
 - thorn apple (karambha)ix, and
 - 'big thorn apple' (mahākarambha)^x;
- the fruits of items like: jequirity $(gu\tilde{n}j\bar{a})^{xi}$, rūṣkara $()^{xii}$, viṣa $()^{xiii}$, and vedikā $()^{xiv}$, are
 - kumudavati (kumadavati)^{xv},
 - reņuka (?)xvi,
 - kurūkaka (?)xvii,
 - 'little bamboo' (venuka)^{xviii}, ¹¹⁰
 - thorn apple (karambha)^{xix},
 - 'big thorn apple' (mahākarambha)^{xx},
 - 'pleaser' (nandanā) xxi,
 - 'crow' (kāka)^{xxii},
- the flower-poisons include those of:
 - rattan (vetra) xxiii,

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110 Not poisonous.
vii unknown; see?
viii unknown; see?
ix Datura metel, L.; see AVS 2.305 (cf. Abhidhānamañjarī), NK #796 ff., Potter 292 f.,
    ADPS 132.
    Datura metel, L.?; see AVS 2.305 (cf. Abhidhānamañjarī), NK #796 ff., Potter 292 f.,
    ADPS 132.
χi
    ; see
xii ; see
xiii; see
xiv; see
xv unknown; see?
xvi ?; see Piper aurantiacum Wall. (NK: #1924) is not poisonous.
xvii?; see?
xviiiBambusa bambos, Druce?; see NK #307
xix Datura metel, L.; see AVS 2.305 (cf. Abhidhānamañjarī), NK #796 ff., Potter 292 f.,
    ADPS 132.
xx Datura metel, L.?; see AVS 2.305 (cf. Abhidhānamañjarī), NK #796 ff., Potter 292 f.,
    ADPS 132.
xxi?; see?
xxii?; see?
xxiiiCalamus rotang, L.; see AVS 1.330, NK #413
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- wild chinchona (*kādamba*)^{xxiv},
- black pepper $(vall\bar{\imath}ja \rightarrow marica)^{xxv}$,
- thorn apple (*karambha*)^{xxvi}, and
- big thorn apple (mahākarambha)**xvii;
- the seven bark, pith $(s\bar{a}ra)$ and resin $(niry\bar{a}sa)$ poisons are:
 - 'gutboiler' (antrapācaka) xxviii,
 - 'blade' (kartarīya) xxix,

#988, IGP 457b

- wild mustard (saurīyaka) xxx,
- emetic nut $(karagh\bar{a}ta \rightarrow karah\bar{a}ta? \rightarrow madana)^{xxxi}$,
- thorn apple (karambha)**xxii,
- wild asparagus ($nandana \rightarrow bahuputr\bar{a}$?) xxxiii , and
- munj grass (nārācaka)**xxiv;***
- the three milky sap $(k \bar{s} \bar{t} r a)$ -poisons are:
 - purple calotropis ($kumudaghn\bar{i} \rightarrow arka?$)^{xxxv},¹¹²
 - oleander spurge (*snuhī*)^{xxxvi}, and

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xxivAnthocephalus cadamba, Miq.; see NK #204
xxv Piper nigrum, L.?; see NK #1929; Rā.6.115, Dha.4.85, Dha.2.88
xxviDatura metel, L.; see AVS 2.305 (cf. Abhidhānamañjarī), NK #796 ff., Potter 292 f.,
   ADPS 132.
xxviDatura metel, L.?; see AVS 2.305 (cf. Abhidhānamañjarī), NK #796 ff., Potter 292 f.,
   ADPS 132.
xxviiinknown; see?
xxixunknown; see?
xxx Cleome viscosa, L.? (cf. Rā.4.144); see AVS 2.116, NK #615
xxxiRandia dumetorum, Lamk.; see NK #2091
xxxiDatura metel, L.; see AVS 2.305 (cf. Abhidhānamañjarī), NK #796 ff., Potter 292 f.,
   ADPS 132.
xxxiAsparagus racemosus, Willd.; see ADPS 441, AVS 1.218, NK #264, IGP 103, IMP
    4.2499ff., Dymock 482ff.
xxxiSaccharum bengalense, Retz.?; see NK #2184
xxxvCalotropis gigantea, (L.) R. Br.; see ADPS 52, AVS 1.341, NK #427, Potter 63
xxx/Euphorbia neriifolia, L., or E. antiquorum, L.; see ADPS 448, AVS (2.388), 3.1, NK
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¹¹¹ The bark of wild asparagus (*Asparagus racemosus*, Willd.) is toxic.

¹¹² The name of this poison, <code>kumuda-ghnī</code>, means 'lotus killer'. In Sanskrit literature, the <code>kumuda</code> lotus is associated with the moon, since it blossoms by night. Since the sun causes this lotus to close, it is therefore an 'enemy' of the lotus. One of the chief words for the sun, <code>arka</code>, is also the name of <code>Calotropis gigantea</code>, which indeed has a milky juice which is a violent purgative, poison and abortifacient.

- 'web-milk' (jālakṣīri) xxxvii;
- the two element $(dh\bar{a}tu)$ -poisons are:
 - 'foam-stone' (phenāśma) xxxviii, and
 - orpiment (haritāla) xxxix; i13
- the thirteen tuber-poisons are:
 - jequirity (*kālakūṭa*)^{xl},¹¹⁴
 - wolfsbane (vatsanābha)*li
 - Indian mustard (sarṣapa) xlii
 - leadwort $(p\bar{a}laka \rightarrow citraka)^{\times liii}$
 - 'muddy' (kardama) xliv, the
 - 'Virāṭa's plant' (vairāṭaka)xlv,
 - nutgrass (*mustaka*)^{xlvi},
 - atis root (śṛṅgīviṣa)^{xlvii},
 - sacred lotus (prapuṇḍarīka) xlviii,

The *Rājanighaṇṭupariśiṣṭa* (9.35) gives *kālakūṭaka* as a synonym for *kāraskara*, or *Strychnos nux-vomica*, L., whose seeds are notoriously poisonous.

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xxxuinknown; see ?
xxxuinknown; see ?
xxxiinknown; see ?
xxxiinknown; see ?
xxxiinknown; see ?
xxxiinknown; see NK v. 2, p. 20 ff.
xl Abrus precatorius, L.? Cf. RRS 21.14.; see AVS 1.10, NK #6, Potter 168.
xli Aconitum napellus, L.; see AVS 1.47, NK #42, Potter 4 f.
xlii Brassica juncea, Czern. & Coss.; see AVS 1.301, NK #378
xliii Plumbago zeylanica (indica? rosea?), L.; see Rā. 6.124, ADPS 119, NK #1966, 1967
xliv unknown; see ?
xlvi Cyperus rotundus, L.; see ADPS 316, AVS 2.296, NK #782
xlviiAconitum heterophyllum, Wall. ex Royle; see AVS 1.42, NK #39
xlviiNelumbo nucifera, Gaertn.; see Dutt 110, NK #1698
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¹¹³ Dutt (1922: 38–42) conjectured that 'foam-stone' may be impure white arsenic obtained by roasting orpiment.

The much later (perhaps sixteenth century) alchemical Rasaratnasamuccaya of pseudo-Vāgbhaṭa (21.14) says that the $k\bar{a}lak\bar{u}$ ṭa poison, here translated as 'jequirity', is similar to ' $k\bar{a}kaca\tilde{n}cu$ ' or 'Crow's Beak', which is indeed a name for the plant jequirity or Abrus precatorius, L., more commonly called $gu\tilde{n}j\tilde{a}$ (not to be confused with $ga\tilde{n}j\tilde{a}$). The black seed-pod is described as having a 'sharp deflexed beak' in botanical descriptions, so the Sanskrit name is quite graphic and appropriate. The poisonous scarlet seeds of A. precatorius can have a distinct black dot or tip, which could perhaps be translated ' $k\bar{a}la-k\bar{u}$ ‡a', or 'Black Tip'.

- radish (*mūlaka*)^{xlix},
- 'alas, alas' (hālāhala)¹,
- 'big poison' (*mahāviṣa*)^{li}, and
- galls (karkata)^{lii}.¹¹⁵

Thus, there are fifty-five stationary poisons.

6 There are believed to be four kinds of wolfsbane, two kinds of nutgrass, and six kinds of Indian mustard. But the rest are said to be unique types.

The effects of poisons

7–10 People should know that root-poisons cause writhing (udvestana), ranting ($pral\bar{a}pa$), and delirium (moha), and leaf-poisons cause yawning, writhing, and wheezing ($\acute{s}v\bar{a}sa$).

Fruit-poisons cause swelling of the scrotum, a burning feeling and writhing. Flower-poisons will cause vomiting, distension ($\bar{a}dhm\bar{a}na$) and sleep ($sv\bar{a}pa$).

The consumption of poisons from bark, pith $(s\bar{a}ra)$ and resin $(niry\bar{a}sa)$ will cause foul breath, hoarseness $(p\bar{a}ru\bar{s}ya)$, a headache, and a discharge of phlegm (kapha).¹¹⁶

The milky sap $(k \circ \bar{\imath} ra)$ -poisons make one froth at the mouth, cause loose stool, and make the tongue feel heavy. The element $(dh \bar{\imath} tu)$ -poisons

¹¹⁵ Leadwort root is a powerful poison. Nutgrass is tuberous, but non-toxic. Atis has highly toxic tuberous roots. Neither sacred lotus nor galls are toxic. The 'alas, alas' poison (hālāhala) is the mythical poison produced from the churning of the ocean at the time of creation: it occurs in medical texts such as the present one, and commentators identify it with one or other of the lethal poisons such as wolfsbane or jequirity. Agrawala (1963: 126) makes the intriguing suggestion that the word hālāhala, possibly to be identified with Pāṇini's hailihila (P.6.2.38), may be of Semitic origin, although his evidence seems uncertain (Steingass (1930: 1506a) cites Persian halāhil 'deadly (poison)' as a loan from Sanskrit). Mayrhofer 1953–72: iii.585 also cites a claim for an Austro-Asiatic origin for the word.

¹¹⁶ At 1.2.6 (Su 1938: 11), Dalhaṇa glosses hoarseness (pāruṣya) as vāgrūkṣatā, "a rough, dry voice."

¹¹⁷ At 6.54.10 (Su 1938: 773), Dalhaṇa glosses loose stool (viḍbheda) as dravapurīṣatā, "having liquid stool."

xlix Raphanus sativus, L.; see NK #2098

l unknown; see Cf. Sodhalanighantu p.43 (sub bola) = stomaka = vatsanābha

li unknown; see?

lii Rhus succedanea, L.; see NK #2136

give one a crushing pain in the chest, make one faint and cause a burning feeling on the palate.

These poisons are classified as ones which are generally speaking lethal after a period of time.

11–17 Symptoms of tuber poisoning

The tuber-poisons, though, are severe. I shall talk about them in detail. With jequirity $(k\bar{a}lak\bar{u}ta)^{liii}$, there is numbness, trembling, and rigidity. With wolfsbane $(vatsan\bar{a}bha)^{liv}$, there is rigidity of the neck, and the faeces, urine, and eyes become yellow. With Indian mustard $(sarṣapa)^{lv}$, the wind becomes defective $(v\bar{a}tavaigunya)$, there is constipation $(\bar{a}-n\bar{a}ha)$, and lumps (granthi) start to appear. With leadwort $(p\bar{a}laka \rightarrow cit-raka)^{lvi}$, everyone agrees that there is weakness in the neck, and speech gets jumbled. With the one called 'muddy' $(kardama)^{lvii}$, there is a discharge (praseka), the faeces pour out, and the eyes turn yellow. With the 'Virāṭa's plant' $(vairāṭaka)^{lvii}$, one's limbs hurt, and one's head becomes ill. With nutgrass $(mustaka)^{lix}$, one's arms and legs grow stiff, and start to tremble.

- With atis root $(\dot{s}\dot{r}\dot{n}g\bar{\imath}v\dot{\imath}sa)^{lx}$, one's limbs grow weak, there is a burning feeling.
- With sacred lotus (*prapuṇḍarīka*)^{lxi}, one's eyes go red, and one's belly becomes distended.
- 16b With radish $(m\bar{u}laka)^{\text{lxii}}$ es, one is drained of colour, one vomits, one has hiccups, distension, and passes out.
- 17a With 'alas, alas' (hālāhala) lxiii, a man starts, after a while, to gasp and turn brown.

liii Abrus precatorius, L.? Cf. RRS 21.14.; see AVS 1.10, NK #6, Potter 168.

liv Aconitum napellus, L.; see AVS 1.47, NK #38, Potter 4 f.

lv Brassica juncea, Czern & Coss.; see AVS 1.301, NK #378

lvi Plumbago zeylanica (indica? rosea?), L.; see Rā. 6.124, ADPS 119, NK #1966, 1967 lvii unknown; see?

lviii unknown; see?

lix Cyperus rotundus, L.; see ADPS 316, AVS 2.296, NK #782

lx Aconitum heterophyllum, Wall. ex Royle; see AVS 1.42, NK #39

lxi Nelumbo nucifera, Gaertn.; see Dutt 110, NK #1698

lxii Raphanus sativus, L.; see NK #2098

lxiii unknown; see Cf. Sodhalanighantu p.43 (sub bola) = stomaka = vatsanābha

- 17b With 'big poison' (*mahāviṣa*)^{lxiv}, one gets violent knots (*granthi*) and stabbing pains in the heart.
- 18a With galls $(karkata)^{lxv}$, one leaps up laughing and gnashing one's teeth.
- These thirteen cited poisons which originate from tubers are fearfully potent. Experts know them all by these ten features: they are traditionally said to be dry $(r\bar{u}k\bar{s}a)$, hot, sharp, rarified $(s\bar{u}k\bar{s}ma)$, fast-acting, pervasive, expansive $(vik\bar{a}sin)$, limpid (visada), light, and indigestible.
- 19b- Because of their dryness they cause inflammation of the wind; their heat inflames the choler and blood. Because of their sharpness they unhinge the mind, and they cut through the connections with the sensitive points (*marman*). Because of being rarified they infiltrate and disconnect the parts of the body. Because they are fast-acting they kill quickly, and because of their pervasiveness they blend with one's physical constitution (*prakṛti*). Because they expand they destroy the humour (*doṣa*)s, element (*dhātu*)s, and the impurities. Because they are limpid they overflow, because they are light they are difficult to cure, and because they are indigestible they are hard to eliminate. And so they cause long suffering.
 - One can be certain that any poison which is instantly lethal, whether it be stationary, mobile, or artificial, will have all ten of these features.

Slow-acting poison

- A poison, whether it be stationary, mobile, or artificial, which has not completely gone from the body, but which is worn out or damaged by anti-toxic medicine, or else dried up by blazing fire, wind, or sunshine, or which has just lost its virulence by itself, becomes a 'slow-acting poison $(d\bar{u}s\bar{v}isa)$ '. Because it has lost its potency it is no longer lethal. It is surrounded by phlegm (kapha) and has an aftermath that lasts for years.
- If he is suffering from this, his stools and complexion deteriorate, he gets bad breath and a nasty taste in his mouth, and is very thirsty. He faints, vomits, his speech is slurred, and he is depressed. Also, he has the symptoms of contaminated dropsy (*dusyodara*).¹¹⁸

^{118 &#}x27;Contaminated dropsy' (duṣyodara or dūṣyudara) is described elsewhere as a condition

lxiv unknown; see?

- 28 If it lodges in his stomach (āmāśaya), his wind and phlegm become diseased; if it lodges in his intestines (pakvāśaya), his wind and choler become diseased. The man's hair and body are ruined, and he looks like a bird whose wings have been chopped off.
- 29a-c If it lodges in one of the body tissue (*dhātu*)s such as the chyle (*rasa*), it causes the diseases that were described as arising from the elements, and it rapidly becomes inflamed on nasty days which are cold and windy.
- Now listen to the preliminary signs of such a case: sleepiness, heaviness, yawning, slackness (viśleṣa) and exhilaration (harṣa), and a chafing of the limbs (aṅgamarda). Next, it causes food-mania (annamada) and indigestion, appetite-loss (arocaka), round blotches (maṇḍala), skin disease (koṭha), and delirium (moha). The body tissues dwindle away (kṣaya), the feet, hands, and face get swollen, dropsy develops, and there is vomiting and diarrhoea. Perhaps his colour may drain away and he may faint or have irregular fever (viṣamajvara). It may cause heightened, powerful thirst.
 - These various disorders are of many different types: one poison may produce madness, while another one may cause constipation $(\bar{a}n\bar{a}ha)$, and yet another may deplete the semen. One may cause slurred speech, while another pallid skin disease (kustha).
 - Traditionally, 'slow-acting poison' $(d\bar{u}s\bar{\iota}-visa)$ is so called because it corrupts $(d\bar{u}sayate)$ the body tissue $(dh\bar{a}tu)s$. This corruption is caused by repetitively keeping to certain locations, times, foods, and sleeping in the daytime.

34- The stages of slow poisoning

In the first shock of having taken a stationary poison, a person goes a brown colour, his tongue becomes stiff, he grows faint, and starts to gasp.

- In the second, he trembles, collapses, has a burning feeling, as well as a sore throat. When the poison reaches the stomach $(\bar{a}m\bar{a}\acute{s}aya)$, it causes pain in the chest (hrd).
- 36 In the third, the roof of his mouth goes dry, he gets violent shooting

which arises when women of ill-character mix nail clippings, hair, urine, faeces, or menstrual blood with a man's food, in order to gain power over him (2.7.11–13).

- pains (\hat{sula}) in the stomach $(\bar{a}m\bar{a}\hat{s}aya)$, and his eyes swell up and go a nasty, yellow colour.
- In the fourth shock, it causes the stomach and intestines to sting (*toda*), he gets hiccups, a cough, a rumbling in the gut (*antra*), and his head becomes very heavy.
- 38 In the fifth he dribbles phlegm (*kapha*), is drained of colour, his joints crack (*parvabheda*), all his humours are inflamed, and he also has a pain in his belly (*pakvādhāna*).
- 39a In the sixth, his consciousness is annihilated and he completely loses control of his bowels.
- 39b In the seventh, his shoulders, back and loins break, and he is finished.

Remedies for the stages of slow poisoning

- In the first shock of the poison, he should vomit and be sprinkled with cold water. Then he should be made to drink an antidote (*agada*) together with honey and ghee.
- In the second, he should vomit as before, and then be given a purgative to drink.
- In the third, it is good for him to drink an antidote and take a nasal medicine (*nasya*) as well as an eye salve (*añjana*).
- 42a In the fourth, he should drink a medical antidote mixed with oil.
- In the fifth, he should be prescribed the antidote together with a decoction ($kv\bar{a}tha$) of honey and liquorice (madhuka)^{lxvi}.
 - In the sixth, the cure is the same as for diarrhoea. And in the seventh, he should have medicated powder blown up his nose, and after having a 'crow's foot ($k\bar{a}kapada$)' cut made on his head, he should have a piece of bloody meat put on it.¹¹⁹
 - 44 In the intervals between each shock, assuming that the above actions

of administering nasal drops (avapīḍa), or blowing medicated powder into the nose (4.40.44–46): it is particularly recommended for unconscious or incapable patients. The 'crow's-foot' procedure is also recommended later in the 'Section on Procedures' (5.5.24a) in cases of snake-bite. It is also described by Caraka (see p.?? below).

have been performed, one should give the patient cold porridge together with ghee and honey, to take away the poison.

Both kinds of poison are destroyed by a porridge prepared with the stewed juice $(ni \not k v \bar a t h a)$ of the following: luffa $(ko \not a t a k y a)^{lxvii}$, migraine tree $(agnimantha)^{lxviii}$, velvet-leaf $(p\bar a t h \bar a)^{lxi}$, 'sun-creeper' $(s\bar u r y a v a l l \bar \iota \to j \bar u v a n t \bar \iota$?) lxx , heart-leaved moonseed $(am r t \bar a)^{lxxi}$, myrobalan $(abhay \bar a)^{lxxii}$ s, siris $(sir \bar \iota s a)^{lxxii}$, white siris $(kin \dot \iota h \bar \iota)^{lxxiv}$, selu plum $(selu)^{lxxv}$, white clitoria $(giry \bar a h v \bar a)^{lxxvi}$, the two kinds of turmeric $(ra-jan \bar \iota)^{lxxvii}$, the two hogweed $(punarnav \bar a)^{lxxviii}$ s (red and white), black cardamom $(hare n u)^{lxxiv}$, the three pungent spices $(trika \dot \iota u)$ (dried ginger $(sun \dot \iota h \bar \iota)^{lxxx}$, long pepper $(pippal \bar \iota)^{lxxxi}$, and black pepper $(mar-ica)^{lxxxii}$), the two Indian sarsaparillas $(s\bar a r i v e)$ (country sarsaparilla $(anant \bar a)^{lxxxiii}$ and black creeper $(p\bar a l i n d \bar \iota)^{lxxxiv}$) and country mallow $(bal \bar a)^{lxxxi}$.

lxviiLuffa cylindrica, (L.) M. J. Roem. or L. acutangula, (L.) Roxb.; see ADPS 252, NK #1514 etc.

lxviiPremna corymbosa, Rottl.; see IMP 1927, ADPS 21, NK #2025, AVS 4.348; GJM 523: = P. integrifolia/serratifolia, L.

lxix Cissampelos pariera, L.; see ADPS 366, NK #592, GJM 573, IMP 1.95; cf. AVS 2.277

lxx Holostemma ada-kodien, Schultes; see ADPS 195, AVS 3.167, NK #1242, IMP 3.1619

lxxi Tinospora cordifolia, (Willd.) Hook.f. & Thoms.?; see ADPS 38, NK #2472 & 624, Dastur #229

lxxiiTerminalia chebula, Retz.; see ADPS 172, NK #2451, Potter 214

lxxiiAlbizia lebbeck, Benth.; see AVS 1.81, NK #91

lxxivAlbizia procera, (Roxb.) Benth.; see GVDB 98, NK #93

lxxvCordia myxa, L. non Forssk.; see GJM 529 (2), IGP 291b, cf. IMP 3.1677f; cf. AVS 2.180 (C. dichotoma, Forst.f.), NK #672 (C. latifolia, Roxb.)

lxxvClitoria ternatea, L.; see AVS 2.129, NK #621

lxxv@urcuma longa, L.; see ADPS 169, AVS 2.259, NK #750

lxxvBoerhaavia diffusa, L.; see ADPS 387, AVS 1.281, NK #363

lxxixAmomum subulatum, Roxb.?; see PVS Caraka 2.734, AVS 1.128, NK #154

lxxxZingiber officinale, Roscoe.; see ADPS 50, NK #2658, AVS 5.435, IGP 1232

lxxxPiper longum, L.; see ADPS 374, NK #1928

lxxxRiper nigrum, L.; see ADPS 294, NK #1929

lxxxlilemidesmus indicus, (L.) R. Br.; see ADPS 434, AVS 3.141-5, NK #1210

lxxxIvhnocarpus frutescens, (L.) R.Br. or Cryptolepis buchanani, Roemer & Schultes; see AVS 3.141, 3.145, 3.203, NK #1283, #1210, ADPS 434

lxxxSida cordifolia, L.; see ADPS 71, NK #2297

47-49 The 'invincible' ghee

There is a famous ghee called 'Invincible' (*ajeya*). It rapidly destroys all poisons and 'always conquers'. It is made with a mash (*kalka*) of the following plants: liquorice (*madhuka*)^{lxxxvi}, Indian rosebay (*tagara*)^{lxxxvii}, costus (*kuṣṭha*)^{lxxxviii}, deodar (*bhadradāru*)^{lxxxix}, black cardamom (*hareṇu*)^{xc}, Alexandrian laurel (*punnāga*)^{xci}, cherry (*elavāluka*)^{xcii}, cobra's saffron (*nāgapuṣpa*)^{xciii}, water-lily (*utpala*)^{xciv}, white clitoria ($sit\bar{a} \rightarrow \acute{s}vet\bar{a}$?)^{xcv}, embelia (vidanga)^{xcvi}, sandalwood (*candana*)^{xcvii}, cassia cinnamon (*patra*)^{xcviii}, 'going-to-my-darling' (*priyangu*)^{xcix}, rosha grass (*dhyāmaka*)^c, the two turmerics (ordinary turmeric (*rajanī*)^{ci} and Indian barberry (*dāruharidrā*)^{cii}), the two Indian nightshade (*bṛhatī*)s (poison berry (*bṛhatī*)^{ciii} and yellowberried nightshade (*kṣudrā*)^{civ}), the two Indian sarsaparillas (*sārive*) (country sarsaparilla (*anantā*)^{cv} and black creeper (*pālindī*)^{cvi}), beggarweed (*sthirā* $\rightarrow \acute{sālaparnī}$)^{cvii}, and 'spotted-leaf' (*sahā* \rightarrow

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lxxx@lycyrrhiza glabra, L.; see AVS 3.84, NK #1136
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lxxx**Vai**bernaemontana divaricata (L.) R.Br. ex Roem. & Schultes.; see GJM 557, AVS 5.232 lxxx**Saiii**ssurea costus, Clarke; see NK #2239

lxxx Cedrus deodara, (Roxb.ex D.Don) G. Don; see AVS 41, NK #516

xc Amomum subulatum, Roxb.?; see PVS Caraka 2.734, AVS 1.128, NK #154

xci Calophyllum inophyllum, L.; see AVS 1.338, NK #425

xcii Prunus cerasus, L.?; see BVDB 58, NK #2037

xciiiMesua ferrea, L.; see NK #1595

xcivNymphaea stellata, Willd.; see GJM 528, IGP 790; Dutt 110, NK #1726

xcv Clitoria ternatea, L.; see AVS 2.129, NK #621

xcviEmbelia ribes, Burm. f.; see ADPS 507, AVS 2.368, NK #929, Potter 113

xcviSantalum album, L.; see ADPS 111, NK #2217

xcvi@innamomum tamala, (Buch.-Ham.) Nees; see AVS 2.84, NK #

xcixCallicarpa macrophylla, Vahl.; see AVS 1.334, NK #420

- c Cymbopogon martinii (Roxb.) Wats; see AVS 2.285, NK #177
- ci Curcuma longa, L.; see ADPS 169, AVS 2.259, NK #750
- cii Berberis aristata, DC.; see Dymock 1.65, NK #685, GJM 562, IGP 141
- ciii Solanum violaceum, Ortega; see ADPS 100, NK #2329, AVS 5.151
- civ Solanum virginianum, L.; see ADPS 100, NK #2329, AVS 5.164
- cv Hemidesmus indicus, (L.) R. Br.; see ADPS 434, AVS 3.141-5, NK #1210
- cvi Ichnocarpus frutescens, (L.) R.Br. or Cryptolepis buchanani, Roemer & Schultes; see AVS 3.141, 3.145, 3.203, NK #1283, #1210, ADPS 434
- cvii Desmodium gangeticum (L.) DC; see Dymock 1.428, GJM 602, NK #1192; ADPS 382, 414 and AVS 2.319, 4.366 are confusing

50-52 Curing the 'slow-acting' poison

Someone suffering from 'slow-acting (dūsīvisa)' poison should be well sweated, and purged both top and bot-Then he should in all cases be made to drink the following antidote which removes 'slow-acting poison':

Take long pepper $(pippal\bar{\iota})^{cix}$, rosha grass $(dhy\bar{a}maka)^{cx}$, spikenard $(m\bar{a}ms\bar{\iota})^{cxi}$, lodh tree $(s\bar{a}vara \to lodhra)^{cxii}$, nutgrass $(paripelava \to plava \to must\bar{a}?)^{cxiii}$, soda crystals $(suvarcik\bar{a} \to suvarjik\bar{a})^{cxiv}$, cardamom $(s\bar{u}ksmail\bar{a})^{cxv}$, 'scented pavonia' $(toya \to b\bar{a}laka)^{cxvi}$, and 'gold-chalk' ochre (kanakagairika). This antitoxin, taken with honey, eliminates 'slow-acting poison'. It is called 'slow-acting poison antidote $(d\bar{u}s\bar{i}vis\bar{a}ri)$ ', and there is no situation where it is not recommended.

- feeling, hiccups, constipation (ānāha), depletion of the semen, distension, diarrhoea, fainting, illness in the heart, bellyache (jaṭhara), madness, trembling, or others, then one should treat each one in its own terms, as well as using the anti-toxic medicines.
 - 'Slow-acting poison' is curable $(s\bar{a}dhya)$ if caught immediately; it is treatable $(y\bar{a}pya)$ if it is of a year's standing; but it cannot be cured in someone who has unhealthy habits or who is weak $(ks\bar{i}na)$.

cviiiUraria lagopoides, DC; see GJM 577, Dymock 1.426, IMP 1.750ff., NK #2542; ADPS 382, AVS 2.319 4.366 are confusing

cix Piper longum, L.; see ADPS 374, NK #1928

cx Cymbopogon martinii (Roxb.) Wats; see AVS 2.285, NK #177

cxi Nardostachys grandiflora, DC.; see NK #1691

cxii Symplocos racemosa, Roxb.; see ADPS 279, NK #2420

cxiiiCyperus rotundus, L.; see ADPS 316, AVS 2.296, NK #782

cxivSodium carbonate; see NK 2, p. 101

cxv Elettaria cardamomum, Maton; see AVS 2.360, NK #924, Potter 66

cxviPavonia odorata, Willd.; see ADPS 498, NK #1822

Thus ends the second chapter, called 'on the knowledge of stationary poisons', in the Procedures Section of Suśruta's *Compendium*.

Abbreviations

Ah 1939 Kumte, Annā Moreśvara, Navare, Kṛṣṇaśāstrī, and Parādkar,

Hariśāstrī (1939) (eds.), श्रीमद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, श्रीमद-रुणदत्तविरचितया सर्वाङ्गसुन्दराख्यया व्याख्यया, हेमाद्रिप्रणीतया आयुर्वेदर-सायनाह्वया टीकया च समुल्लसितम् = *The Astāngahṛidaya* (6th edn., Muṃbayyām: Nirṇayasāgara Press), ark:/13960/t3tt6967d.

Anup Anup Sanskrit Library (n.d.).

Apte Apte, Vaman Shivaram (1992), The Practical Sanskrit-English

Dictionary (Kyoto: Rinsen Book Company), ISBN: 4-653-00038-

7; Reprinted from Gode and Karve 1957–9.

AS Asiatic Society (n.d.).

As 1980 Āṭhavale, Anamta Dāmodara (1980) (ed.), Aṣṭāṅgasaṅgrahaḥ.

Śrīmad Vṛddhavāgbhaṭaviracitaḥ Induvyākhyāsahitaḥ (Puṇe: Maheśa Anaṃta Āṭhavale, Śrīmad Ātreya Prakāśanam), ark:/

13960/t9773bb9z.

Bhela 1921 Mookerjee, Ashutosh and Ananta Krishna Shastri, Ved-

antabisharad (1921) (eds.), *The Bhela Samhita. Sanskrit Text* (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), Bhela-saṃhitā. Text with English

Translation, Commentary and Critical Notes (Haridas Ayurveda

Series, 8; Varanasi: Chaukhambha Visvabharati).

BL British Library (n.d.).

Ca. 1941 Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्व-सुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता च-

रकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संविलता (3rd edn., Mumbayyām: Nirnaya Sagara Press), URL, accessed

01/01/2018.

HIML Meulenbeld, Gerrit Jan (1999–2002), A History of Indian

Medical Literature, 5 vols. (Groningen: E. Forsten), ISBN:

9069801248.

KL *Kaiser Library* (n.d.).

MW Monier-Williams, Monier, Leumann, E., Cappeller, C., et al. (1899), *A Sanskrit–English Dictionary Etymologically and Philologically Arranged, New Edition* (Oxford: Clarendon Press); 1970 reprint.

NAK National Archives of Kathmandu (n.d.).

NCC Raghavan, V. et al. (1949–), New Catalogus Catalogorum, an Alphabetical Register of Sanskrit and Allied Works and Authors, 39 vols. (Madras University Sanskrit Series; Madras: University of Madras); v.1: revised edition, 1968.

NGMCP (2014), 'Nepal-german Manuscript Cataloguing Project. Online Title List and Descriptive Catalogue', Universität Hamburg and Deutsche Forschungsgemeinschaft, URL.

NK Nadkarni, K. M. (1982a), Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies, Appendices & Indexes ... in Two Volumes, ed. A. K. Nadkarni, 2 vols. (3 ed., revised and enlarged by A. K. Nadkarni, Bombay: Popular Prakashan), ISBN: 8171541429, URL.

RORI Rajasthan Oriental Research Institute (n.d.).

Su 1889 Bhaṭṭācāryya, Jīvānanda Vidyāsāgara (1889) (ed.), सृश्रुतः. सूत्र-निदान-शारीर-चिकित्सा-कल्पोत्तर-तन्त्र-किल्पत आयुर्वेद. भगवता धन्वन्तरिणोपदिष्टः सृश्रुतनामधेयेन तच्छिष्येण विरचितः (3rd edn., Calcutta: Saratī Press), ark:/13960/t1nh6j09c; HIML:IB, 311, edition b.

Ācārya, Yādavaśarma Trivikrama (1915) (ed.), सुश्रुतसंहिता, सु-श्रुतेन विरचिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लसिता, आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = The Sushrutasamhita of Sushruta, the Nibandhasangraha Commentary of Shri Dalhaṇāchārya (Mumbayyāṃ: Nirṇayasāgaramudrāyantrālaye), ark:/13960/t3sv0mt50, accessed 29/07/2020; HIML: IB, 312 edition *v.

- Ācārya, Yādavaśarma Trivikrama (1931) (ed.), सुश्रुत-संहिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुष्ठसिता, महर्षिणा सुश्रुतेन विरचिता, सूत्र-निदान-शारीर-चिकित्सा-कल्पस्थानोत्तरतन्त्रात्मकः. आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = The Sushrutasaṃhitā of Sushruta with the Nibandhasangraha Commentary of Shree Dalhaṇāchārya (2nd edn., Mumbayyāṃ: Pāṇḍuraṅga Jāvajī at the Nirṇayasāgaramudrāyantrālaye), ark:/13960/t9j41sg94, accessed 09/06/2020; HIML: IB, 312 edition *v.
- Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (1938) (eds.), श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्य-व्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यप- ञ्जिकाव्याख्यया च समुल्लसिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (3rd edn., Bombay: Nirṇayasāgara Press), ark :/ 13960 / t09x0sk1h; HIML: IB, 313, edition cc ('the vulgate').
- Su 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 (Su 1938).
- Ācārya, Yādavaśarma Trivikrama and Śarman, Nandakiśora (1939) (eds.), सृश्रुतसंहितायाः सूत्रस्थानम्. श्रीचक्रपाणिदत्तविरचितया भानुमतीव्याख्याया समेतम् = Sushrut-sañhitā (sūtra Sthān) with Bhānumatī Commentary by Chakrapāṇi Datta with Introduction by Gaṇanāth Sen (Śrīsvāmi Lakṣmīrāma Nidhi Granthamālā = Shrī Swāmī Lakshmī Rām Trust Series, 1; [Jaipur]: Śyāmasundara Śarman), ark:/13960/t54g0d12m; Printed at the Nirṇayasāgara Press, Bombay.
- Su 1945Ācārya, Yādavaśarma Trivikramācārya and Ācārya, Nārāy-aṇa Rāma (1945) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता(मूलमात्रा). पाठान्तर-परिशिष्टादिभिः संविलता = the Suśrutasaṃhitāof Suśruta with Various Readings, Notes and Appendix etc.(Mumbāi: Nirṇayasāgarākhyamudraṇālaye), url.
- TMSSML Tanjore Maharaja Serfoji Saraswati Mahal Library (n.d.).

Viṣṇudh. Śarman, Madhusūdana and Śarman, Mādhavaprasāda (1912) (eds.), विष्णुधर्मोत्तरपुराणम् = [Viṣṇudharmottarapurāṇa] (Mumbai: Khemarāja Śrīkṛṣṇadāsa at the Śrīveṅkaṭeśvara Steam Press), ark:/13960/t6qz6fr23; Lithograph format. Edited on the basis of a manuscript belonging to the astrologer Śudhākaraśarman of the Varanasi Sanskrit Pāṭhaśālā.

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References

- Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्वसुनोपदिष्टा, तच्छि-ष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तवि-रचितया आयुर्वेददीपिकाव्याख्यया संवलिता (3rd edn., Mumbayyāṃ: Nirnaya Sagara Press), URL, accessed 01/01/2018.
- Ācārya, Yādavaśarma Trivikramācārya and Ācārya, Nārāyaṇa Rāma (1945) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (मूलमात्रा). पाठान्तर-परिशिष्टादिभिः संविलता = the Suśrutasaṃhitā of Suśruta with Various Readings, Notes and Appendix etc. (Mumbāi: Nirṇayasāgarākhyamudraṇālaye), URL.
- Adriaensen, Rob C. R., Barkhuis, Roelf, and Ruijters, Jean-Louis (1984), 'An English Translation of Suśrutasaṃhitā, Nidānasthāna 1, 1–39, Together with Gayadāsa's Nyāyacandrikā', in Gerrit Jan Meulenbeld (ed.), *Proceedings of the International Workshop on Priorities in the Study of Indian Medicine* (Groningen: Forsten), 277–310.
- Agrawala, V. S. (1963), *India As Known to Pāṇini: A Study of the Cultural Material in the Aṣṭādhyāyī* (2nd edn., Varanasi: Prthvi Prakashan); First published in 1953.
- Angermeier, Vitus (2020), Regenzeiten, Feuchtgebiete, Körpersäfte. Das Wasser in der klassischen indischen Medizin (Wien: Österreichische Akademie der Wissenschaften).
- Baber, Zaheer (1996), *The Science of Empire: Scientific Knowledge, Civilization, and Colonial Rule in India* (Albany: State University of New York Press).
- Bausi, Alessandro et al. (2015), *Comparative Oriental Manuscript Studies. An Introduction* (Hamburg: Tredition). DOI: 10.5281/ZENODO.46784.

- Bendall, Cecil (1883), Catalogue of the Buddhist Sanskrit, Manuscripts in The, University Library, Cambridge: With Introductory Notices and Illustrations of the Palaeography and Chronology of Nepal and Bengal (Cambridge: University Press), ark:/13960/t03x8vz7b.
- Bhaṭṭācārya, Candrakānta (1910–7) (ed.), सुश्रुतसंहिता प्रथमखण्डम् सूत्रस्थानात्म-कम् हाराणचन्द्रचक्रवर्तिकविराजविरचितसुश्रुतार्थसन्दीपनभाष्य-समेतम्...चन्द्रकान्त भट्टाचार्य्य-प्रमुखैः संशोधितम् = [The Suśrutasaṃhitā with the Commentary Suśrutārthasandīpanabhāṣya by Hārāṇacandra Cakravarti] (Kalikātā: Satya Press); Edition "t" in HIML: IB, 312.
- Bhattarai, Bidur (2020), Dividing Texts. Conventions of Visual Text-Organisation in Nepalese and North Indian Manuscripts (Studies in Manuscript Cultures; Berlin/Boston: de Gruyter), 388.
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Parameswaran, Madhu K., et al. (2021), 'Further Insight into the Role of Dhanvantari, the Physician to the Gods, in the Suśrutasaṃhitā', *Academia Letters*. Doi: 10.20935/AL2992.
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Rimal, Madhusudan, et al. (2021), 'Palhaṇa and the Early 'Nepalese' Version of the Suśrutasamhitā'. Doi: 10.20935/al3733.
- Bollée, Willem (2010), 'Remarks on the Cultural History of the Ear in India', in Nalini Balbir (ed.), Svasti: Essays in Honour of Professor Hampa Nagarajaiah for His 75th Birthday (Bangalore: K. S. Mudappa Smaraka Trust), 141–67, URL, accessed 23/01/2022.
- Breton, P. (1826), 'On the Native Mode of Couching', *Transactions of the Medical and Physical Society of Calcutta*, 2: 341–82, ark:/13960/t3dz8nn5t, URL, accessed 02/06/2021.
- Bronkhorst, Johannes (2021), 'Patañjali's Aryāvarta = Śuṅga realm?', *Academia Letters*. DOI: 10.20935/al291; Article 291.
- Bronner, Yigal (2021) (ed.), 'The Pandit Project' (30 Sept.), URL.
- Burghart, Marjorie (2016), 'The TEI Critical Apparatus Toolbox: Empowering Textual Scholars through Display, Control, and Comparison Features', *Journal of the Text Encoding Initiative*, 10/Issue 10. DOI: 10.4000/jtei.1520, URL, accessed 12/12/2017.

- Burghart, Marjorie (2017), 'Textual Variants', in Marjorie Burghart, James Cummings, and Elena Pierazzo (eds.), *Digital Editing of Medieval Texts: A Textbook* (DEMM), URL, accessed 04/07/2021.
- Burnell, Arthur Coke (1880), *A Classified Index to the Sanskrit Mss. in the Palace at Tanjore* (London: Trübner), ark:/13960/t4xh86j61; Bhelasamhitā described on pp. 67 ff.
- Carpue, J. C. (1816), An Account of Two Successful Operations for Restoring a Lost Nose from the Integuements of the Forehead...Including Descriptions of the Indian and Italian Methods (London: Longman et al.), ark:/13960/t2q57fn42, accessed 20/03/2019.
- Cone, Margaret (2001), *A Dictionary of Pāli* (Oxford: The Pali Text Society), ISBN: 0 86013 394 x.
- Cordier, P. (1903), 'Récentes découvertes de mss. médicaux sanscrits dans l'Inde (1898–1902)', *Muséon, Nouvelle Série*, 4: 321–52, ark:/13960/t26b2j457, accessed 02/01/2020; Reprinted in Roşu 1989: 539–70.
- Coult, Ro. (1731), 'An Account of the Diseases of Bengall', in *Indian Science* and *Technology in the Eighteenth Century* (Impex India), 141 f., 276.
- Crawford, D. G. (1930), *Roll of the Indian Medical Service*, 1615–1930 (London, Calcutta, Simla: Thacker).
- Das, Rahul Peter (2003), The Origin of the Life of a Human Being. Conception and the Female According to Ancient Indian Medical and Sexological Literature (Indian Medical Tradition; Delhi: Motilal Banarsidas), ISBN: 81-208-1998-5.
- Dave, K. N. (1985), *Birds in Sanskrit Literature* (Delhi: Motilal Banarsidass), ISBN: 0-89581-676-8, ark:/13960/t2c94cv80.
- Deshpande, Vijaya (1999), 'Indian Influences on Early Chinese Ophthalmology: Glaucoma As a Case Study', *Bulletin of the School of Oriental and African Studies*, 62: 306–22. DOI: 10.1017/S0041977X00016724.
- (2000), 'Ophthalmic Surgery: A Chapter in the History of Sino-indian Medical Contacts', *Bulletin of the School of Oriental and African Studies*, 63/3: 370–88, ISSN: 0041-977X. DOI: 10.1017/s0041977x00008454.
- Dimitrov, Dragomir and Tamot, Kashinath (2007), 'Kaiser Shamsher, His Library and His Manuscript Collection', *Kaiser Shamsher, His Library and His Manuscript Collection*, 3 (Jan.): 26–36, URL.

- Dutt, Uday Chand (1922), The Materia Medica of the Hindus...with a Glossary of Indian Plants by George King. Revised Edition...by Binod Lall Sen and Ashutosh Sen and Pulin Krishna Sen (Krishnadas Sanskrit Studies; 3rd edn., Calcutta: Madan Gopal Dass for the Adi-Ayurveda Machine Press), URL, accessed 04/10/2017; Reprinted Varanasi: Chowkhamba Saraswatibhavan, 1980.
- Edgerton, Franklin (1939), 'The Epic Triṣṭubh and Its Hypermetric Varieties', *Journal of the American Oriental Society*, 59/2: 159–74. DOI: 10.2307/594060.
- Elliot, Robert Henry (1918), The Indian Operation of Couching for Cataract: Incorporating the Hunterian Lectures Delivered before the Royal College of Surgeons of England on February 19 and 21, 1917 (London: H. K. Lewis).
- Emeneau, M. B. (1969), 'Sanskrit Syntactic Particles "kila, khalu, nūnam", *Indo-Iranian Journal*, 11/4: 241–68.
- Falk, Harry (1991), 'Silver, Lead and Zinc in Early Indian Literature', *South Asian Studies*, 7/1: 111–7. DOI: 10.1080/02666030.1991.9628430.
- Fan, Ka Wai (2005), 'Couching for Cataract and Sino-indian Medical Exchange Fromthe Sixth to the Twelfth Century Ad', *Clinical and Experimental Ophthalmology*: 188–90. DOI: 10.1111/j.1442-9071.2005.00978.x; Unaware of Deshpande 1999; 2000.
- Fitzgerald, James L. (2009), 'A Preliminary Study of the 681 Triṣṭubh Passages of the Mahābhārata', in Robert P. Goldman and Muneo Tokunaga (eds.), *Epic Undertakings* (Papers of the 12th World Sanskrit Conference; Delhi: Motilal Banarsidass Publishe), 95–117.
- Gaṇapatiśāstrī, T. (1920–5), Āryamañjuśrīmūlakalpaḥ (Trivandrum Sanskrit Series, 70; Anantaśayane: Rājakīyamudraṇayantrālaye), ark:/13960/t4pk5sj0j.
- Gode, P. K. and Karve, C. G. (1957–9) (eds.), Revised and Enlarged Edition of Prin. V. S. Apte's the Practical Sanskrit-English Dictionary (Poona: Prasad Prakashan), ark:/13960/t3gx47212, accessed 20/10/2017.
- Gombrich, Richard (1979), "He cooks softly": dverbs in Sanskrit grammar, Bulletin of the School of Oriental and African Studies, 42/2 (June): 244–56. DOI: 10.1017/s0041977x0014580x.

- Gupta, Sri Madhusudana (1835–6) (ed.), Ayur-veda-prakāśa [also Called Suśruta-saṃhitā] by Suśruta. the Suśruta, or System of Medicine, Taught by Dhanwantari, and Composed by His Disciple Suśruta, 2 vols. (Calcutta: Education Press and Baptist Mission Press), ark:/13960/t6841qw6x.
- Harimoto, Kengo (2011), 'In Search of the Oldest Nepalese Manuscript', *Rivista degli Studi Orientali*, 84/1–4: 85–106, ISSN: 0392-4866, URL, accessed 08/09/2019.
- —— (2014), 'Nepalese Manuscripts of the Suśrutasaṃhitā', *Journal of Indian and Buddhist Studies* (*Indogaku Bukkyogaku Kenkyu*), 62/3: 23–29 (1087-1093). DOI: 10.4259/ibk.62.3_1087, URL, accessed 08/09/2019.
- (pre-published), '[Preliminary Edition of the Nepalese MSS of the Su-śrutasaṃhitā, adhyāyas 1.1–3, 6.4]'; Unpublished document dated 2010.
- Hayashi, Takao (2017), 'The Units of Time in Ancient and Medieval India', *History of Science in South Asia*, 5/1: 1–116. DOI: 10.18732/h2ht0h.
- Hemarāja Śarman (1938) (ed.), काश्यपसंहिता (वृद्धजीवकीयं तन्त्रं वा) महर्षिणा मा-रीचकश्यपेनोपदिष्टा ... हेमराजशर्मणा लिखितेन विस्तृतेन उपोद्धातेन सहिता ... सत्यपाल भिषगा कृतया विद्योतिनी हिन्दीव्याख्यया ... समुल्लसिता (1st edn., Mumba: Nirṇayasāgara Press), URL, accessed 02/02/2018.
- Hendley, T. Holbein (1895), A Medico-topographical Account of Jeypore, Based on the Experience of Twenty Years' Service As a Residency Surgeon and Thirteen As Superintendent of Dispensaries at Jeypore, Rajputana (Calcutta: Calcutta Central Press Company).
- Hessler, Franciscus (1844–55), Suśrutas Ayurvédas: Id Est Medicinae Systema a Venerabili D'hanvantare Demonstratum a Susruta Discipulo Compositum; Nunc Primum Ex Sanskrita in Latinum Sermonem Vertit, Introductionem, Annotationes Et Rerum Indice Franciscus Hessler (Erlangen: Ferdinandum Enke), URL, accessed 04/11/2017.
- Hoernle, A. F. Rudolf (1893–1912) (ed.), *The Bower Manuscript: Facsimile Leaves, Nagari Transcript, Romanised Transliteration and English Translation with Notes* (New Imperial Series, 22; Calcutta: Government of India and under the patronage of the Bengali Government, Archaeological Survey of India), ark:/13960/t05z1bg4q.
- —— (1907), Studies in the Medicine of Ancient India: Osteology or the Bones of the Human Body (Oxford: Clarendon Press).

- Hofer, Theresia (2007), 'Swami Laxmi Ram's Ayurvedic Pharmacy in Jaipur, India', *Wellcome History*, 34: 2–3, URL, accessed 01/07/2021.
- Holwell, J. Z. (1767), An Account of the Manner of Inoculating for the Small Pox in the East Indies With...Observations on The...Mode of Treating That Disease in Those Parts (London: T. Becket & P. A. de Hondt), ark:/13960/t3ws9h63c.
- Jack, David Morton (1884), 'A Thesis on Cataract in India: Its Pathology and Treatment', Wellcome Library, London, MS.3007, URL, accessed 02/06/2021.
- Jośī, Veṇīmādhavaśāstrī and Jośī, Nārāyaṇa Harī (1968), Āyurvedīya Mahākośaḥ arthāt Āyurvedīya Śabdakośaḥ Saṃskṛta—Saṃskṛta (Muṃbaī: Mahārāṣṭra Rājya Sāhityta āṇi Saṃskṛti Maṃḍaḷa), url.
- Kangle, R. P. (1969), *The Kauṭilīya* Arthaśāstra (2nd edn., Delhi: Motilal Banarsidass), ISBN: 81-208-0042-7, ark:/13960/t3gz6qh1s, accessed 23/09/2021.
- Keith, Arthur Berriedale (1908), review of A. F. Rudolf Hoernle (1907), Studies in the Medicine of Ancient India: Osteology or the Bones of the Human Body (Oxford: Clarendon Press), in Zeitschrift Der Deutschen Morgenländischen Gesellschaft, 1/62: 134–9, URL, accessed 17/04/2021.
- Klebanov, Andrey (2010), 'The *Nepalese Version of the Suśrutasaṃhitā and Its Interrelation with Buddhism and the Buddhists', MA thesis (Hamburg: Hamburg University, Sept.), URL, accessed 08/09/2019.
- —— (2021*a*), 'On the Textual History of the Suśrutasaṃhitā (1): A Study of Three Nepalese Manuscripts', to be published in *eJIM: Electronic Journal of Indian Medicine*, URL, accessed 09/09/2019.
- —— (2021b), 'On the Textual History of the Suśrutasaṃhitā, (2): An Anonymous Commentary and its Identified Citations', in Toke Lindegaard Knudsen, Jacob Schmidt-Madsen, and Sara Speyer (eds.), Body and Cosmos: Studies in Early Indian Medical and Astral Sciences in Honor of Kenneth G. Zysk (Leiden, Boston: Brill), 110–39.
- Kuist, James M. (1982), *The Nichols File of The Gentleman's Magazine* (Madison: University of Wisconsin Press), ISBN: 0-299-08480-9, ark:/13960/t53g2ct2z.

- Leffler, Christopher T. et al. (2020), 'The History of Cataract Surgery: From Couching to Phacoemulsification', *Annals of Translational Medicine*, 8/22: 1551–97, ISSN: 2305-5847. DOI: 10.21037/atm-2019-rcs-04, URL, accessed 02/11/2020.
- Lienhard, Siegfried (1978), 'On the Meaning and Use of the Word Indragopa', *Indologica taurinensia*, 6: 177–88, URL, accessed 06/02/2021; The indragopa is a 'red velvet mite'.
- Longmate, Barak (1794), 'A Curious Chirurgical Operation', *The Gentleman's Magazine and Historical Chronicle*, 64.4 (Oct.): 883, 891, 892; I am grateful to the late John Symons of the Wellcome Library who identified the author 'B. L.' as the journalist Barak Longmate. See also Kuist 1982: 87.
- Majno, Guido (1975), The Healing Hand. Man and Wound in the Ancient World (Cambridge, MA: Harvard University Press), URL, accessed 26/08/2021.
- Malamoud, Charles (1996), 'Paths of the Knife: Carving up the Victim in Vedic Sacrifice', in *Cooking the World: Ritual and Thought in Ancient India. Translated from the French by David White* (Delhi, Bombay, etc.: Oxford University Press), 169–80.
- Manucci, Niccolò (1907–8), Storia Do Mogor or, Mogul India, 1653–1708 by Niccolao Manucci, Venetian; Translated with Introduction and Notes, by William Irvine (The Indian Texts Series; London: J. Murray), URL, accessed 04/10/2021.
- Masai, François (1950), 'Principes et conventions de l'édition diplomatique', *Scriptorium*, 4: 177–93. DOI: 10.3406/scrip.1950.2294.
- Mayrhofer, Manfred (1953–72), Kurzgefaßtes etymologisches Wörterbuch des Altindoarischen; a Concise Etymological Sanskrit Dictionary (Heidelberg: Carl Winter, Universitätsverlag).
- McHugh, James (2021), An Unholy Brew: Alcohol in Indian History and Religions (New York: Oxford University Press), 416 pp., ISBN: 9780199375936, URL.
- Meulenbeld, Gerrit Jan (1974), *The Mādhavanidāna and Its Chief Commentary: Chapters* 1–10. *Introduction, Translation, and Notes* (Leiden: Brill), ISBN: 978-90-04-03892-9; Meulenbeld provided a supplement to his 1974 listing of plant identities as an appendix in Das 2003.

- Meulenbeld, Gerrit Jan (1984), 'The Surveying of Sanskrit Medical Literature', in id. (ed.), *Proceedings of the International Workshop on Priorities in the Study of Indian Medicine* (Groningen: Forsten), 37–56.
- —— (1989), 'The Search for Clues to the Chronology of Sanskrit Medical Texts As Illustrated by the History of Bhangā (cannabis Sativa Linn.)', Studien zur Indologie und Iranistik, 15: 59–70.
- —— (1992), 'The Characteristics of a Doṣa', Journal of the European Āyurvedic Society, 2/1: 1–5, URL, accessed 31/08/2021.
- —— (2008), The Mādhavanidāna with "Madhukośa," the Commentary by Vijayarakṣita and Śrīkaṇṭhadatta (Ch. 1-10). Introduction, Translation, and Notes (Delhi: Motilal Banarsidass); Meulenbeld provided a supplement to his 1974 listing of plant identities as an appendix in Das 2003.
- —— (2011), 'The Relationships between Doṣas and Dūṣyas: A Study on the Meaning(s) of the Root Murch-/mūrch', *eJournal of Indian Medicine*, 4/2: 35–135, URL, accessed 13/10/2017.
- Miles, M. (1999), 'Personal Communication', Mar.; Letter of 4 March.
- Moureau, Sébastien. (2015), 'The Apparatus Criticus', in Alessandro Bausi et al. (eds.), *Comparative Oriental Manuscript Studies: An Introduction* (Hamburg: Tredition), 348–52, ISBN: 978-3-7323-1768-4, URL, accessed 04/07/2021.
- Mukhopādhyāya, Girindranāth (1913), *The Surgical Instruments of the Hindus, with a Comparative Study of the Surgical Instruments of the Greek, Roman, Arab, and the Modern Eouropean* (sic) *Surgeons* (Calcutta: Calcutta University), ark:13960/t1zd2pq29, accessed 29/01/2018; Vol.2: ark:/13960/t9r25qd8m. Reprinted as a single volume, New Delhi, 1987.
- Nadkarni, K. M. (1954), Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies, Appendices & Indexes ... in Two Volumes, ed. A. K. Nadkarni, 2 vols. (3 ed., revised by A. K. Nadkarni, Bombay: Popular Prakashan), ark:/13960/t6rz4h160.
- (1982a), Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies, Appendices & Indexes ... in Two Volumes, ed. A. K. Nadkarni, 2 vols. (3 ed., revised and enlarged by A. K. Nadkarni, Bombay: Popular Prakashan), ISBN: 8171541429, URL.

- Nadkarni, K. M. (1982b), Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies, Appendices & Indexes ... in Two Volumes, ed. A. K. Nadkarni, 2 vols. (3 ed., revised and enlarged by A. K. Nadkarni, Bombay: Popular Prakashan), ISBN: 8171541429, URL.
- Narayana, Ala and Thrigulla, Saketh Ram (2011), 'Tangible Evidences of Surgical Practice in Ancient India', *Journal of Indian Medical Heritage*, 16: 1–18, URL, accessed 02/06/2021.
- NGMCP (2014), 'Nepal-german Manuscript Cataloguing Project. Online Title List and Descriptive Catalogue', Universität Hamburg and Deutsche Forschungsgemeinschaft, URL.
- Oberlies, Thomas (2003), *A Grammar of Epic Sanskrit* (Indian Philology and South Asian Studies, 5; Berlin: De Gruyter), ISBN: 9783110144482. DOI: 10.1515/9783110899344.
- Olivelle, Patrick (2013), King, Governance, and Law in Ancient India: Kauṭilya's Arthaśāstra. a New Annotated Translation (New York: Oxford University Press), ISBN: 9780199891825. DOI: 10.1093/acprof:osobl/9780199891825.003.0001.
- Osbaldeston, Tess Anne and Wood, R. P. A. (2000), Dioscorides. De Materia Medica. Being an Herbal with Many Other Medicinal Materials Written in Greek in the First Century of the Common Era. a New Indexed Version in Modern English [Introductory Notes by R. P. Wood] (Johannesburg: IBIDIS Press), ISBN: 0-620-23435-0, URL.
- Pandey, Anshuman (2012), 'Proposal to Encode the Newar Script in ISO/IEC 10646', URL.
- Pass, Gregory (2003), Descriptive Cataloging of Ancient, Medieval, Renaissance, and Early Modern Manuscripts (Chicago: American Library Association), ISBN: 0-8389-8218-2, URL.
- Pillay, V. V. (2010), 'Common Indian Poisonous Plants', in D. A. Warrell, T. M. Cox, and J. D. Firth (eds.), *Oxford Textbook of Medicine* (5th edn., Oxford University Press), 1371–5. DOI: 10.1093/med/9780199204854.003.090302.

- Preisendanz, Karin (2007), 'The Initiation of the Medical Student in Early Classical Āyurveda: Caraka's Treatment in Context', in Birgit Kellner et al. (eds.), Pramāṇakīrtiḥ. Papers Dedicated to Ernst Steinkellner on the Occasion of His 70th Birthday. Part 2, ii, 2 vols. (Wiener Studien zur Tibetologie und Buddhismuskunde, 70.2; Wien: Arbeitskreis für Tibetische Und Buddhistische Studien Universität Wien), 629–68, ISBN: 9783902501097, URL.
- Price, Kenneth M. (2013), 'Electronic Scholarly Editions', in Ray Siemens and Susan Schreibman (eds.), *A Companion to Digital Literary Studies* (Chichester, UK: John Wiley & Sons, Ltd), 434–50. DOI: 10 . 1002 / 9781405177504 . ch24, URL, accessed 04/07/2021.
- Rai, Saurav Kumar (2019), 'Invoking 'Hindu' Ayurveda: Communalisation of the Late Colonial Ayurvedic Discourse', *The Indian Economic & Social History Review*, 56/4: 411–26. DOI: 10.1177/0019464619873820; Online first.
- Rama Rao, B. et al. (2005), Sanskrit Medical Manuscripts in India (New Delhi: Central Council for Research in Ayurveda & Siddha), ark:/13960/t88h7763b.
- Rhys Davids, Thomas William and Stede, William (1921–5), *The Pali Text Society's Pali-English Dictionary* (London: The Pali Text Society), URL.
- Roşu, Arion (1989), *Un demi-siècle de recherches āyurvédiques*. *Gustave Liétard et Palmyr Cordier: Travaux sur l'histoire de la médecine indienne* (Paris: Institut de Civilisation Indienne).
- Sastri, Hrishikesh and Gui, Siva Chandra (1895–1917), *A Descriptive Catalogue of Sanskrit Manuscripts in the Library of Calcutta Sanskrit College* (Calcutta: Baptist Mission Press).
- Sastri, P. P. S. (1933), A Descriptive Catalogue of the Sanskrit Manuscripts in the Tanjore Maharaja Serfoji's Sarasvati Mahal Library Tanjore: Natya, Sangita, Kamasastra, Vaidya & Jyotisa, nos. 10650 11737 (Srirangam: Sri Vani Vilas Press), ark:/13960/t3nw8bc12.
- Śāstrī, Vardhamāna Pārśvanātha (1940) (ed.), उग्रादित्याचार्यकृत कल्याणकारक (राष्ट्रभाषानुवादसिहत) = The Kalyāṇa-kārakam of Ugrādityacharya, Edited with Introduction, Translation, Notes, Indexes and Dictionary (Sakhārāma Nemacaṃda Graṃthamālā, 129; Solāpura: Seṭha Goviṃdajī Rāvajī Dośī), ark:/13960/t2q617g4d.

- Scott, H. (1817), 'Some Remarks on the Arts of India, with Miscellaneous Observations on Various Subjects', *Journal of Science and the Arts*, 2: 67–72, ill. after 133, ark:/13960/t9870jt4g; Breton 1826: 358–363 cites Scott's description of cataract couching.
- Sena, Gaṅgāprasād et al. (1886–93) (eds.), सुश्रुतसंहिता...दल्लनाचार्य्य-कृत-निवन्ध-संग्रह, चक्रपाणिदत्त-कृत-भानुमती-टीका...वङ्गानुवाद...इरेजि प्रतिशब्द (Calcutta: Maṇirāma Press); Edition "g" in HIML: IB, 311.
- Sharma, Har Dutt (1939), Descriptive Catalogue of the Government Collections of Manuscripts Deposited at the Bhandarkar Oriental Research Institute, Vol. XVI, Part I, Vaidyaka (Descriptive Catalogue of Manuscripts in the Government Manuscripts Library, XVI.I; Pune: Bhandarkar Oriental Research Institute), ark:/13960/t0ms6rc70, accessed 23/10/2019.
- Sharma, Priya Vrat (1972), *Indian Medicine in the Classical Age* (Varanasi: Chowkhamba Sanskrit Series Office).
- —— (1982), *Dalhaṇa and his Comments on Drugs* (Delhi: Munshiram Manoharlal).
- —— (1999–2001), Suśruta-Saṃhitā, with English Translation of Text and Ḥal-haṇa's Commentary Alongwith (sic) Critical Notes, 3 vols. (Haridas Ayurveda Series, 9; Varanasi: Chaukhambha Visvabharati).
- Shastri, R. Shama (1920) (ed.), बोधायनगृह्यसूत्रम् *The Bodhāyana Grihyasutra* (Mysore: University of Mysore), ark:/13960/t2t492622.
- Singh, Thakur Balwant and Chunekar, K. C. (1972), *Glossary of Vegetable Drugs in Brhattrayī* (Varanasi: Chowkhamba Sanskrit Series Office).
- Sircar, Dinesh Chandra (1987), '6. Rākshaskhāli (Sundarban) Plate; Śaka 1118', *Epigraphia Indica* (1953–54), 30: 42–3.
- Sivarajan, V. V. and Balachandran, Indira (1994), *Ayurvedic Drugs and Their Plant Sources* (New Delhi, Bombay, Calcutta: Oxford & IBH Publishing).
- Sleeman, W. H. (1893), Rambles and Recollections of an Indian Official (London: Constable), ark:/13960/t22c4bx7w, accessed 14/03/2018; V. 2 at http://n2t.net/ark:/13960/t2s52bq7w.
- Smith, Brian K. (1994), Classifying the Universe: The Ancient Indian Varṇa System and the Origins of Caste (New York, Oxford: Oxford University Press), ISBN: 0-19-508498-5.

- Spink, M. S. and Lewis, G. L. (1973) (eds.), *Albucasis on Surgery and Instruments: A Definitive Edition of the Arabic Text with English Translation and Commentary* (London: Wellcome Institute of the History of Medicine).
- Srikantha Murthy, K. R. (2000–2), *Illustrated Suśruta Saṃhitā: Text, English Translation, Notes, Appendices and Index* (Jaikrishnadas Ayurveda Series, 102; 1st edn., Varanasi: Chaukhambha Orientalia).
- Steingass, F. (1930), A Comprehensive Persian-English Dictionary Including the Arabic Words and Phrases to Be Met with in Persian Literature (London: Kegan Paul, Trench, Trubner).
- Suvedī, K. S. and Tīvārī, N. (2000) (eds.), Sauśrutanighaṇṭuḥ: granthādau vistṛtena granthavaiśiṣṭyaprakāśakenopodghātena avasāne ca dravyāṇām anekabhāṣānām āvalī- paryāyasaṅgrahābhyāṃ samalaṅkrtaḥ Suśrutas-aṃhitāyāṃ prayuktānām auṣadhadravyāṇāṃ paryāya-guṇakarmavarṇātmako pūrvagranthaḥ (Belajhuṇḍī, Dāṅ: Mahendrasaṃskrutaviśvavidyālayaḥ).
- Tavernier, Jean-Baptiste (1684), *Collections of Travels through Turky* (sic), *into Persia, and the East-Indies* (London: M. Pitt).
- The Unicode Consortium (1991–2020), 'The Unicode Standard 13.0, NewaRange: 11400–1147F', URL, accessed 20/07/2021.
- Thorburn, S. S. (1876), *Bannu; or Our Afghan Frontier* (London: Trübner & Co.), URL, accessed 10/09/2019; Reprinted Lahore: Niaz Ahmad, 1978.
- Unschuld, Paul Ulrich (1984), *Medicine in China: A History of Ideas* (Berkeley: University of California Press), ISBN: 0520050231.
- Velankar, H. D (1925–30), Descriptive Catalogue of the Sanskṛta and Prākṛta Manuscripts in the Library of the Bombay Branch of the Royal Asiatic Society (Bombay: Royal Asiatic Society, Bombay), ark:/13960/t53g00h0n; Biswas #0115.
- Warrier, P. K., Nambiar, V. P. K., and Ramankutty, C. (1994–6) (eds.), *Indian Medicinal Plants: A Compendium of 500 Species. Vaidyaratnam P. S. Varier's Arya Vaidya Sala, Kottakal* (Madras: Orient Longman).
- Watt, George (1889–96), A Dictionary of the Economic Products of India (Calcutta: Dept. Revenue and Agriculture, Government of India), URL, accessed 28/04/2021.

- Watt, George (1908), *The Commercial Products of India, Being an Abridgement of "the Dictionary of the Economic Products of India"* (London: John Murray), ark:/13960/t9t14xh3x.
- Whitney, William Dwight (1885), *The Roots, Verb-forms, and Primary De-rivatives of the Sanskrit Language. A Supplement to his Sanskrit Grammar* (Leipzig: Breitkopf and Härtel), ark:/13960/t3qv3p906.
- Wilson, H. H. (1823), 'On the Medical and Surgical Sciences of the Hindus', *The Oriental Magazine and Calcutta Review*, 1: 207–12, 349–56, URL.
- Wren, R. C. (1956), *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, ed. R. W. Wren (Rustington, Sussex: Health Science Press), ark:/13960/t14n65c9g.
- Wujastyk, Dagmar (2012), Well-mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda (New York: Oxford University Press).

 DOI: 10.1093/acprof:0so/9780199856268.001.0001.
- —— (2019), 'Iron Tonics: Tracing the Development from Classical to Iatrochemical Formulations in Ayurveda', *HIMALAYA*, the Journal of the Association for Nepal and Himalayan Studies, 39/1, ISSN: 2471-3716, URL, accessed 23/07/2019.
- Wujastyk, Dominik (1993), 'Indian Medicine', in W. F. Bynum and Roy Porter (eds.), *Companion Encyclopedia of the History of Medicine*, i (London: Routledge), chap. 33, 755–78, ISBN: 0-415-04771-4, URL.
- —— (2002), 'Cannabis in Traditional Indian Herbal Medicine', in Ana Salema (ed.), Āyurveda at the Crossroads of Care and Cure. Proceedings of the Indo-European Seminar on Ayurveda held at Arrábida, Portugal, in November 2001 (Lisbon: Centro de História de Além-Mar, Universidade Nova de Lisboa), 45–73, ISBN: 972-98672-5-9, URL, accessed 27/05/2019.
- (2003), The Roots of Ayurveda: Selections from Sanskrit Medical Writings (Penguin Classics; 3rd edn., London, New York, etc.: Penguin Group), ISBN: 0-140-44824-1.
- —— (2004), 'Agni and Soma: A Universal Classification', Studia Asiatica: International Journal for Asian Studies, IV–V, ed. Eugen Ciurtin: 347–70, ISSN: 1582–9111, URL.

- Wujastyk, Dominik (2013), 'New Manuscript Evidence for the Textual and Cultural History of Early Classical Indian Medicine', in *Medical Texts and Manuscripts in Indian Cultural History*, ed. Dominik Wujastyk, Anthony Cerulli, and Karin Preisendanz (New Delhi: Manohar), 141–57, URL.
- —— (2021), 'MS London BL H. T. Colebrooke 908', URL.
- Zimmermann, F. (1983), 'Suśrutasamhita. Essay review.', *Bulletin of the History of Medicine*, 57/2: 291–3, ISSN: 00075140, URL.
- Zimmermann, Francis (1999), *The Jungle and the Aroma of Meats* (2nd edn., Delhi: Motilal Banarsidass), ISBN: 8120816188.
- Zysk, Kenneth G. (1984), 'An Annotated Bibliography of Translations into Western Languages of Principle Sanskrit Medical Treatises', *Clio Medica*, 19/3–4: 281–91.
- —— (1985), Religious Healing in the Veda: With Translations and Annotations of Medical Hymns from the Rgveda and the Atharvaveda and Renderings from the Corresponding Ritual Texts (Transactions of the American Philosophical Society; Philadelphia: American Philosophical Society), ISBN: 0871697572.
- —— (1986), 'The Evolution of Anatomical Knowledge in Ancient India with Special Reference to Cross-cultural Influences', *Journal of the American Oriental Society*, 106: 687–705. DOI: 10.2307/603532.
- —— (2000), Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery (Indian Medical Tradition; 2nd edn., Delhi: Motilal Banarsidass); First published 1991. Reprint of 1998 edition.

Glossary

ala a fira ar a fi tha a limala a	-Si 1-
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	gut
	antra 43
	harṣa
sungu 40	exhilaration 42
decoction	hoarseness
	pāruṣya 39
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	chest 42
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9	indian sarsaparillas
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