

# The *Suśrutasaṃhitā* on the Plastic Surgery of the Ears and Nose: The Nepalese Recension

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# Introduction

## The Aim of the Article

The Compendium of Suśruta (*Suśrutasaṃhitā*) is amongst the most important treatises on medicine to survive from the ancient world. It has been studied seriously by historians since it first became available in print in the mid-nineteenth century.<sup>1</sup> The study of this work has yielded rich historical discoveries, for example about the earliest history of surgery, ancient pharmacology, toxicology and many other social and medical topics. Yet there remain fundamental unanswered questions about the history of the text itself and about related issues in the history of medicine in Asia ([HIML](#): IA, 203–389).

In January 2007, a previously unknown manuscript of the *Suśrutasaṃhitā* was brought to scholarly attention (Dimitrov and Tamot 2007). MS Kathmandu KL 699 is a Nepalese manuscript covering about two thirds of the text. It is dated to 878 CE and is amongst the earliest dated manuscripts known from South Asia (Harimoto 2011: 87–88). The manuscript has been declared by UNESCO to be part of the Memory of the World (UNESCO 2013).

The newly-discovered manuscript in Nepal is related to two other early palm-leaf manuscripts in the National Archives in Kathmandu (NAK 5/333, 1/1079). [kleb-2011](#); Klebanov ([2021a](#)) has assembled compelling evidence for believing that these Nepalese manuscripts present a version of the text that was in wider circulation in northern India, especially Bengal, in the period up to about 1200 CE. Generally speaking, the Nepalese version of the *Suśrutasaṃhitā* is more rudimentary than the versions commented on by Cakrapāṇidatta (*fl.* tenth century CE) and Ḍaḥaṇa (*fl.* twelfth century CE), the latter of which has formed the basis of modern printed editions, such as those of Trivikramji Acharya and others ([Su 1915](#); [Su 1938](#); P. V. Sharma 1999–2001).

This article presents a critical edition and annotated translation of the sixteenth chapter of the *Ślokasthāna*, the first book of the Nepalese version of the *Suśrutasaṃhitā* (SS.1.16).<sup>2</sup> This chapter is important in the history of

1 A selection of prominent contributions includes: Hoernle 1897; 1906; 1907; Strauss 1934; Singhal et al. 1972–82; Sharma 1975; Rây et al. 1980; Adriaensen et al. 1984; Yano 1986; Meulenbeld 1999–2002; Sharma 1999–2001; Valiathan 2007. HELP!

2 This book is called the *Sūtrasthāna* in subsequent versions of the *Suśrutasaṃhitā*.

Indian medicine because of its discussion of surgical methods for repairing torn ears and severed noses. In addition to discussing the manuscripts and published editions used in this new edition, the introduction of the article addresses some of the challenges of editing the Nepalese manuscripts and the salient differences between the Nepalese version and those known to Cakrapāṇidatta and Ḍalhaṇa, as exemplified by the sixteenth chapter. The notes to the edition incorporate alternative readings mentioned by the commentators, and the annotations to the translation discuss instances where the text is uncertain; non-standard spellings and syntax; the meaning of technical and obscure terms; relevant remarks by the commentators; ambiguities in the identification of medical ingredients, in particular, plant names; and the additional compounds, verses and passages in Ḍalhaṇa's version of the text. In short, this article is a pilot for undertaking a complete edition and translation of the Nepalese version of the *Suśrutasamhitā*.

### Importance of SS.1.16 in the History of Medicine

Simple forms of surgery have a long history in South Asia. In works datable to at least 1200 BCE we learn how a reed was used as a catheter to cure urine retention.<sup>3</sup> Cauterization too was used to prevent wounds from bleeding. The *Brāhmaṇa* literature of the early first millennium BCE contains more detailed descriptions of animal butchery in the context of religious sacrifice that involved the enumeration of internal organs and bones.<sup>4</sup> This exemplifies an early Sanskrit vocabulary for internal parts of bodies, but it is not the same as medical dissection, whose methods and purpose is quite different.<sup>5</sup> With the *Suśrutasamhitā* we find ourselves in the presence of something quite different and more developed, in which the body was studied specifically for medical and surgical purposes.<sup>6</sup> The text gives us a historical window onto a school of professionalised surgical practice which existed almost two millennia ago, and which in its day was perhaps the most advanced school of surgery in the world.

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3 Zysk 1985: 70–71.

4 Malamoud 1996.

5 Keith (1908) pointed out that the enumeration of the bones in the *Brāhmaṇas* was derived from correspondences with the numbering of various verse forms, not from anatomical observation.

6 Zysk 1986.

The author of the *Suśrutasamhitā* describes how a surgeon should be trained and how various operations should be done. There are descriptions of ophthalmic couching (the dislodging of the lens of the eye), perineal lithotomy (cutting for stone in the bladder), the removal of arrows and splinters, suturing, the examination of dead human bodies for the study of anatomy, and other procedures.<sup>7</sup> The author of *Suśrutasamhitā* claimed that surgery is the most ancient and most efficacious of the eight branches of medical knowledge (1.1.15–19 (Su 1938: 4)). Discussion with contemporary surgeons suggests that many details in the descriptions could only have been written by a practising surgeon: it is certain that elaborate surgical techniques were a reality in the author's circle.

### Torn ear lobes

Suśruta's description of the repair of torn ear lobes is again unique for its time. Majno noted that 'through the habit of stretching their earlobes, the Indians became masters in a branch of surgery that Europe ignored for another two thousand years'.<sup>8</sup> The different types of mutilated ear lobe which the *Suśrutasamhitā* describes are not always easy to understand from the Sanskrit: the illustrations supplied in Majno's text help visualization.<sup>9</sup>

### Rhinoplasty

One of the best-known surgical techniques associated with *Suśrutasamhitā* is rhinoplasty, the repair or rebuilding of a severed nose. The history of this operation and a translation of the Sanskrit passage from the vulgate edition of the *Suśrutasamhitā* have been published in Wujastyk (2003: 67–70, 99–100).<sup>10</sup> This fascinating technique is certainly old in South Asia, having been witnessed by travellers from Marco Polo in the seventeenth century onwards.<sup>11</sup> Many witnesses, including the most famous, Cruso and Findlay,<sup>12</sup> describe an operation that differs from *Suśrutasamhitā* in that it takes

7 Wilson 1823; Mukhopādhyāya 1913; Deshpande 2000; Wujastyk 2003; Narayana and Thrigulla 2011 and many other studies.

8 Majno 1975: 291.

9 Majno 1975: 290–291; reproduced with permission in Wujastyk 2003: 92–93.

10 See also HIML: IB, 327–328, note 186 for further literature and reflections.

11 Manucci 1907–8: ii.301.

12 Longmate 1794: 883, 891 f.

the grafting skin from the forehead, not the cheek. But the nineteenth-century account of Thorburn is especially interesting, since the technique follows *Suśrutasamhitā* exactly in taking flesh from the cheek, not the forehead.<sup>13</sup>

As noted by Meulenbeld, none of the known commentators – Jejjaṭa, Gayadāsa, Cakrapāṇi or Ḍalhaṇa – explained the technique in any detail beyond lexical glosses.<sup>14</sup> This suggests that the commentators did not in fact know the technique at first-hand. Perhaps by the late first millennium, the technique had moved into the professional competence of barber-surgeons? On the other hand, perhaps the influence was in the other direction, and a technique known to practitioners elsewhere in South Asia in the late first millennium was written into the text of *Suśrutasamhitā*. The description consists of only five verses and they are written in the Upendravajrā metre, which is different from the rest of the chapter. The description's appearance at the very end of the chapter, its terseness, its ornate metre, and the paucity of the commentators' treatment could all be taken as pointing in this direction.

## The Sanskrit Text

### The Nepalese Version

Andrey's contribution here

### Cakrapāṇidatta and Ḍalhaṇa's Versions

The commentaries of Cakrapāṇidatta and Ḍalhaṇa, called the *Bhānumatī* and *Nibandhasaṅgraha* respectively, are based on similar versions of the *Suśrutasamhitā*, both of which are significantly different to the Nepalese version. Ḍalhaṇa was aware of Cakrapāṇidatta's work and reiterated many of his predecessor's remarks, so the commentator's interpretation of the root text is largely consistent.

<sup>13</sup> Thorburn 1876: 352–3.

<sup>14</sup> HIML: IB, 328. Ḍalhaṇa also noted that a rather different version of the text, cast in śloka metre, was also known to him from other sources (1.16.27–31 (Su 1938: 81a)). Ḍalhaṇa's variant bears a resemblance to the description of the operation given in printed editions of the *Aṣṭāṅgahṛdayasamhitā* (Ah Utt.18.59–65 (Ah 1939: 841)).

Trikamajī Ācārya's edition of the *Sūtrasthāna* of the *Bhānumatī* (Su 1939) duplicates the version of the *Suśrutasaṃhitā* in his edition of the *Nibandhasaṅgraha* (Su 1938), except in a few obvious cases where Cakrapāṇidatta glosses a word or compound that is different to the one glossed by Ḍalhaṇa.<sup>15</sup> The duplication of the root text creates the somewhat misleading impression that both commentators had an almost identical version of the *Suśrutasaṃhitā*. However, there is evidence in SS.1.16 that this was not the case. For example, Ḍalhaṇa comments on four verses (1.16.11–14, Su 1938: 78) that Cakrapāṇidatta cites separately in his commentary (Su 1939: 128–129), introducing each one as 'some people read' (*ke cit paṭhanti*). This clearly indicates that these verses were not in the version of the *Suśrutasaṃhitā* upon which Cakrapāṇidatta was commenting, yet Ācārya includes them in the root text of the *Bhānumatī*.

Also, Cakrapāṇidatta does not acknowledge or comment on some verses in the version of the *Suśrutasaṃhitā* known to Ḍalhaṇa. Although it is possible that a commentator may not have remarked on a verse because its meaning was clear, in some cases the commentarial convention of citing the first words of a new verse or passage provides firmer ground for suspecting the absence of a verse in the root text. For example, the prose passage of SS.1.16.18 in the *Bhānumatī* (Su 1939: 130), which is SS.1.16.19 in the *Nibandhasaṅgraha* (Su 1938: 79), is followed by several verses that elaborate on the content of the prose passage, and both commentators introduce these verses and cite the opening words of the first verse before glossing specific terms. However, Cakrapāṇidatta does not introduce, cite or comment on the same verses as Ḍalhaṇa (SS.1.16.20–22ab, Su 1938: 79), and yet the first of the verses commented on by Ḍalhaṇa appears in the root text of Ācārya's edition of the *Bhānumatī* (SS.1.16.19, Su 1939: 130), and the others (SS.1.16.20–21ab) are included in parenthesis. A similar instance of this occurs at *Bhānumatī* SS.1.16.31, where Ācārya includes a verse in parenthesis that was commented on by Ḍalhaṇa (SS.1.16.32, Su 1938: 81) but not by Cakrapāṇidatta. It appears that the manuscript on which Ācārya's edition of the *Bhānumatī* was based does not include the root text.<sup>16</sup> Therefore, the inclusion of SS.1.16.19–21ab

15 For example, in SS.1.16.18, Cakrapāṇidatta glosses *rājasarṣapa* whereas Ḍalhaṇa glosses *gaurasarṣapa*, and Ācārya reflects this in the root texts of the *Bhānumatī* (Su 1939: 130) and *Nibandhasaṅgraha* (Su 1938: 79).

16 This observation is based on the opening passage of MS 1887-1935 of the *Bhānumatī*, which is transcribed in Eggling 1896: 928. The transcription has the commentary



and 31 in the root text of the *Bhānumatī* is an unsubstantiated hypothesis.

In fact, there is some evidence that the Nepalese version was more similar to Cakrapāṇidatta's version than to Ḍalhaṇa's. For example, 1.16.5 of the Nepalese version begins with the compound *doṣasamudayāt* whereas the version known to Ḍalhaṇa (SS.1.16.6, [Su 1938](#): 77) inserts two compounds, *kliṣṭajihmāpraśastasūcīvyadhāt* and *gāḍhataravartivāt*, before this. Cakrapāṇidatta (SS.1.16.5, [Su 1939](#): 126–127) begins his comment on this passage by glossing *doṣasamudayāt*, which suggests that he was not aware of any compounds prior to this one. If one looks beyond SS.1.16, there are instances where the Nepalese version (1.1.28) and the root text of Cakrapāṇidatta have the same reading, which Ḍalhaṇa mentions as an alternative read by others. For example, 1.1.28 of the Nepalese version has *tatrāsmiṇ chāstre*, which is the reading commented on by Cakrapāṇidatta ([Su 1939](#): 17). However, Ḍalhaṇa (SS.1.1.22, [Su 1938](#): 5) comments on *asmiṇ chāstre* and states that others read *tatrāsmiṇ chāstre*. Also, in his commentary on SS.1.1.8.1, Ḍalhaṇa ([Su 1938](#): 5) notes the variant reading *ṣaṣṭyā vidhānaiḥ*, which is not in his root text but evidently was in Cakrapāṇidatta's (SS.1.1.6, [Su 1939](#): 11). As discussed elsewhere (Birch 2021), the reading of *ṣaṣṭyā vidhānaiḥ* is likely a corruption of *ṣaṣṭyābhidhānaiḥ* in the Nepalese version (1.1.9).

## Differences between the Nepalese and Subsequent Versions of SS.1.16

The structural differences between the Nepalese and subsequent versions has been discussed by Klebanov ([2021a](#): 27–44), which include the frame story,<sup>17</sup> the name of the first book (*Ślokaśthāna*), the structuring of the text according to chapter and section colophons, and an additional passage in the *Kalpasthāna*. Klebanov ([2021a](#): 44–55) also makes general observations on distinct features of the Nepalese version's content and looks specifically at lists of skin lesions arising from urinary disease and vital energies. And in an effort to demonstrate the possibility of greater coherence in the Nepalese version, Harimoto ([2011](#): 101–104) has compared its classification of snakes with Ḍalhaṇa's version.

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without the root text. See the section below on Ācārya's 1939 edition for details of the sources Ācārya used for this edition.

17 On this topic, also see the more recent Birch et al. ([2021](#)).



On the whole, these observations indicate that [...synopsis of general conclusions here, Andrey?...]

The following detailed comparison of 1.16 of the Nepalese version with Ḍalhaṇa's *Nibandhasaṅgraha* unfolded as the chapter was edited. The differences appear to emanate largely from attempts to standardise, simplify or clarify the language of the Nepalese version, add and redact information, and introduce changes to recipes and treatments. Examples from 1.16 have been provided to demonstrate the general observations which, it is hoped, a larger survey of the text will verify.

Table 1 reveals the extent to which 1.16 of the Nepalese version was redacted to create the one known by Ḍalhaṇa. In this particular case, twenty-seven verses have been added, eight (11-14, 21-22ab, 23cd-24, 32) of which are well-integrated with the existing material in so far as they reiterate and elaborate on the content of passages in the Nepalese version. A block of nineteen verses (26.1-19) at the end of this chapter in Ācārya's edition of the *Nibandhasaṅgraha* (Su 1938: 80) was known by Ḍalhaṇa. These verses cover additional diseases of the ear lobes, as well as their treatment and complications. Although Ḍalhaṇa concedes that some read them in this chapter, he concludes that they were not composed by sages and, therefore, should not be read. Ācārya probably included these verses because they were in his manuscripts,<sup>18</sup> and Ḍalhaṇa's comments prompted him to place them in parentheses. Be this as it may, this large block of verses is absent in the Nepalese version.

In Table 1, one can also see that verses 17 and 18 of the Nepalese version were transposed in the redaction of Ḍalhaṇa's version, in which they are 26 and 25 respectively. Although this only occurs once in 1.16, such transposing of verses and even their hemistiches is more prevalent in the redaction of other chapters of the *Suśrutasaṃhitā*.

Apart from the addition of verses, the redacting of the version known to Ḍalhaṇa involved many small, yet sometimes significant, changes that are summarised below.

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18 Ācārya does not state that these verses were absent in some or all of his manuscripts, which he usually does in a footnote if this is the case. A broader survey of manuscripts would be helpful for establishing whether these verses were part of the transmission of the *Suśrutasaṃhitā* in India. For example, they are in MS Hyderabad Osmania 137-3(b).

Nepalese version	Dalhana's version
1	1
–	2
2–9	3–10
–	11–14
10–15	15–20
–	21–22ab
16	22cd–23ab
–	23cd–24
–	→ 25
17	26
–	26.1–19
18	–
19–23	27–31
–	32

Table 1: A Comparison of Verses in 1.16 of the Nepalese and Dalhana's Versions

## Changing Spelling, Sandhi and Syntax

In the majority of cases, efforts were made by redactors to standardise, simplify or improve the language of the Nepalese version. Such changes include the standardising of spelling,<sup>19</sup> sandhi,<sup>20</sup> and verbal forms,<sup>21</sup> as well as interventions to simplify and clarify syntax,<sup>22</sup> which often involved splitting compounds.<sup>23</sup> In some instances, these changes improved the grammar,<sup>24</sup> or altered the meaning.<sup>25</sup> However, some prefixes of verbal forms,<sup>26</sup> case endings,<sup>27</sup> and indeclinables were changed for less apparent reasons.<sup>28</sup> There is also a tendency to replace uncommon words with generic ones,<sup>29</sup> add indeclinables,<sup>30</sup> omit the verb to be at the end of sentences,<sup>31</sup> and introduce verses after a prose passage with the phrase *bhavati cātra*.<sup>32</sup>

- 19 For example, *pattāṅga* (SS.1.16.21) → *paṭaṅga* (1.16.29, Su 1938: 81). For more information on this, see the relevant footnote to the translation.
- 20 or example, °*hastena ṛju* (SS.1.16.2) → °*hastena rju* (1.16.3, Su 1938: 76).
- 21 For example, *unnāmayitoā* (SS.1.16.21) → *prānnamya* (1.16.29, Su 1938: 81); *avacūrṇayīta* (SS.1.16.21) → *upaharet* (1.16.29, Su 1938: 81).
- 22 For example, *śoṇitabahutvanivedanāyām cānyadeśaviddham iti jānīyāt | nirupadravatā taddeśaviddhalingam |* (SS.1.16.3) → *śoṇitabahutvena vedanayā cānyadeśaviddham iti jānīyāt | nirupadravatayā taddeśaviddham iti |* (1.16.4, Su 1938: 76); *āmatailapariṣeṇopacaret* (SS.1.16.6) → *āmatailena pariṣecayet* (1.16.7, Su 1938: 77); *supariṅhītaṃ* (SS.1.16.10) → *supariṅhītaṃ ca kṛtvā* (1.16.15, Su 1938: 78); *anena* (SS.1.16.15) → *snehenaitena* (1.16.20, Su 1938: 79).
- 23 For example, *yadṛcchāviddhāyām sirāyām* (SS.1.16.4) → *yadṛcchayā viddhāsu sirāsu* (1.16.5, Su 1938: 76); *dhānyāmlakapālacūrṇam* (SS.1.16.10) → *dhānyāmlaṃ kapālacūrṇam* (1.16.20, Su 1938: 78).
- 24 For example, *surāmaṇḍakṣīram* (SS.1.16.10) → *surāmaṇḍaṃ kṣīram* (1.16.15, Su 1938: 78).
- 25 For example, *kṣīṇālpamāṃsaḥ* (SS.1.16.12) → *kṣīṇo 'lpamāṃsaḥ* (1.16.17, Su 1938: 79).
- 26 For example, *samvaddhitāḥ* (SS.1.16.8) → *vivarddhitāḥ* (1.16.9, Su 1938: 77); *niveśya* (SS.1.16.10) → *sanniveśya* (1.16.15, Su 1938: 78); *avabadhya* (SS.1.16.10) → *ca baddhvā* (1.16.15, Su 1938: 78).
- 27 For example, *māse* (SS.1.16.2) → *māsi* (1.16.3, Su 1938: 76).
- 28 For example, *api* (SS.1.16.13) → *vā* (1.16.18, Su 1938: 79); *ca* (SS.1.16.16) → *tu* (1.16.23, Su 1938: 79); *tu* (SS.1.16.18) → *ca* (1.16.25, Su 1938: 80).
- 29 For example, *mrakṣayet* (SS.1.16.15) → *yojayet* (1.16.20, Su 1938: 79); *nahyet* (SS.1.16.21) → *baddhvā* (1.16.29, Su 1938: 81).
- 30 For example, [absent] (SS.1.16.6) → *ca* (1.16.7, Su 1938: 77); [absent] (SS.1.16.10) → *tatra* (1.16.15, Su 1938: 78); [absent] (SS.1.16.12) → *api* (1.16.17, Su 1938: 79).
- 31 The words *bhavati* or *bhavanti* are omitted four times in Ḍalhaṇa's version (1.16.10 (twice), 1.16.17 and 1.16.18, Su 1938: 77, 79).
- 32 For example, [absent] (SS.1.16.11) → *bhavati cātra* (1.16.16, Su 1938: 79).

**Changing Technical Terms**

**Augmenting the Text**

**Transposing Words, Verses and Passages**

**Redacting Recipes and Elaborating on Treatments**

## The Edition

### Manuscripts

Andrey

### Features of the manuscript transmission

Andrey

### Palaeographical features

- śrita for śṛta.
- yātri for yāṭṛ (Su.ka.1.63)
- punarṇavā (Su.ka.1.61)
- ś and s in KL 699.
- b and v in KL 699 and NAK 5-333.
- cha and ccha
- line-fillers
- ṇ for n (punarṇavā)

### Chart of characters

[[[Put a chart from QuickPalaeographer here.]]]

## The Printed Editions

The careful survey of printed editions of the *Suśrutasamhitā* by Meulenbeld lists no fewer than 44 entries.<sup>33</sup> These range from the first edition by Madhusūdana Gupta (1835) to editions in the 1970s. The number of reprints and editions since that time might almost double that number. Translations begin with Hessler's Latin translation in 1844 and continue up to the present in scores of publications in many languages.<sup>34</sup>

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<sup>33</sup> [HIML](#): IIB, 311–314.

<sup>34</sup> E.g., [HIML](#): IIB, 314–315; Zysk 1984.

## The Vulgate

The great ayurvedic scholar Yādavaśarman Trivikrama Ācārya produced three successive editions of the *Suśrutasaṃhitā* with the commentary of Ḍaḷhaṇa, in 1915, 1931 and 1938. These editions, especially the last, are generally considered the most scholarly and reliable editions of the work, and have been constantly reprinted up to the present day.<sup>35</sup> We refer to the last of these editions as “the vulgate.”

The 1915 edition was based on three manuscripts. The 1931 edition used another seven manuscripts plus two printed editions. For his final 1938 edition, Ācārya used a further three manuscripts.<sup>36</sup> These sources are described as follow, with an overview in Table 2.

### The sources of the 1915 edition

- 1 Calcutta, Royal Asiatic Society. Covers the *sūtra*, *nidāna*, *śārīra* and *kalpa sthānas*.
- 2 Jaipur, Pandit Gaṅgādharaḥṭṭaśarman, lecturer at the Royal Sanskrit University. Covers the *cikitsāsthāna* and the *uttaratantra*.
- 3 Bundi, my great friend the royal physician Paṃ. Śrīprasādaśarman. Covers the *uttaratantra*.

### The sources of the 1931 edition

- 1 Vārāṇasī, professor of literature, the great Gaurīnāthapāṭhaka. With the *Nibandhasaṅgraha*. Covers the *nidānasthāna* and *uttaratantra*.
- 2 Ahmedabad. My friend Sva. Vā. Vaidya Raṇachoḍalāla Motīlālaśarman. With the *Nibandhasaṅgraha*. Covers the *śārīrasthāna*.
- 3 From the personal library of my great friend Sva. Vā. Vaidya Murārajīśarman. Extremely old. No commentary. Covers the *śārīrasthāna*.
- 4 Puṇe, BORI library. With the *Nibandhasaṅgraha*. Covers the *śārīrasthāna*.<sup>37</sup>
- 5 Puṇe, BORI library. With the *Nibandhasaṅgraha*. Complete. With some damaged folia.

<sup>35</sup> See also the study of these editions by Klebanov (2021a: §1.2) and Wujastyk (2013: 143–144).

<sup>36</sup> The following account of the sources is paraphrased from Y. T. Ācārya and N. R. Ācārya’s own account of his sources (Su 1938: 22).

<sup>37</sup> Not one of the three MSS of the *śārīrasthāna* described in H. D. Sharma 1939.

- 6 Bombay, Asiatic Society. Incomplete.<sup>38</sup>
- 7 Varanasi, the private library of Vaidya Tryambakaśāstrī. Covers the *cikitsāsthāna*. The variant readings of this MS were compiled by Prof.
- 8 A printed edition together with the commentary *Suśrutasandīpana-bhāṣya* by Professor Hārāṇacandra Cakravārtti. Complete work. This is the 1910 Calcutta edition numbered “t” by Meulenbeld (HIML: IB, 312).<sup>39</sup>
- 9 A printed edition of the first 43 chapters of the *sūtrasthāna*, printed in Bengali script, with the commentaries *Bhānumatī*, *Nibandhasaṅgraha*, edited by Vijayaratnasena and Niśikāntasena. This is the 1886 Calcutta edition numbered “g” by Meulenbeld (HIML: IB, 311).<sup>40</sup>

### The sources of the 1938 edition

- 1 Gwalior, from the library of my great friend Paṃ. Rāmeśvaraśāstrin Śukla. Covers the *sūtra*, *nidāna*, *śārīra*, *cikitsā* and *kalpasthānas*.
  - 2 Bikaner, from the library of the Royal Palace, supplied by Paṃ. Candraśekharaśāstrin. Contains the commentary *Nyāy-acandrikāpañjikāvyaṅkhyā* by Gayadāsa. Covers the *nidānasthāna*. This is almost certainly MS Bikaner Anup 4390.<sup>43</sup>
  - 3 Kathmandu, located in the private library of the Royal Guru Hemarāja Śarman. An extremely old palm-leaf manuscript. Readings from this MS were compiled by Paṃ Nityānandaśarman Jośī and sent to Ācārya. Covers from the beginning of the work to the end of the ninth chapter of the *cikitsāsthāna*. The siglum for this manuscript in footnotes was ता for तालपत्रपुस्तके.
- 
- 38 Possibly MS Mumbai AS B.I.3 or MS Mumbai AS B.D.109 (Velankar 1925–30: v. 1, # 212 and 213). But both these have the *Nibandhasaṅgraha*. The first covers only the *śārīrasthāna*; the second may be complete, but Velankar calls it only “disorderly.”
  - 39 Bhaṭṭācārya 1910–7.
  - 40 Sena et al. 1886–93.
  - 41 Covers chapters 1–43 only.
  - 42 Covers chapters 1–9 only.
  - 43 See Dominik Wujastyk, “MS Bikaner AnupLib 4390.” Pandit. <<http://panditproject.org/entity/108068/manuscript>>.



Table 2: The sources of Yādavaśarman T. Ācārya's three editions: manuscript coverage (●) and print coverage (○).

edition source	1915			1931									1938		
	1	2	3	1	2	3	4	5	6	7	8	9	1	2	3
<i>sthāna</i>															
<i>sū.</i>	●							●	?		○	○ <sup>41</sup>	●		●
<i>nī.</i>	●			●				●	?		○		●	●	●
<i>śā.</i>	●				●	●	●	●	?		○		●		●
<i>cī.</i>		●						●	?	●	○		●		● <sup>42</sup>
<i>ka.</i>	●							●	?		○		●		
<i>utt.</i>		●	●	●				●	?		○				

## Evaluation

Estimates show that there are approximately 230 extant manuscript witnesses for the *Suśrutasamhitā*.<sup>44</sup> Many of these manuscripts cover only one or more of its chapters. Nevertheless, this is an order of magnitude more evidence than was considered by Ācārya for his vulgate editions.

While the descriptions provided by Ācārya of his source materials seems at first to be moderately comprehensive, Table 2 reveals the underlying paucity of textual sources for these editions. At first, it appears that fifteen manuscripts were consulted. However, we quickly see that two of the sources were other people's printed editions, and one of those covered less than a quarter of the work (no. 9 of 1931). That reduces the manuscript base to 13 manuscripts. Ācārya does not appear to have seen two of the manuscripts at all, having been sent collations prepared for him by others (7 of 1931 and 3 of 1938). Thus, Ācārya's final edition was based on the personal consultation of eleven partial manuscripts. One of them remains unidentified (6 of 1931). Only a single manuscript covers the whole of the *Suśrutasamhitā*, no. 5 of the 1931 edition. Manuscript 1 of 1938 is the next most complete, but it omits the *uttaratantra*, which comprises a third of the work. Manuscript 1 of the 1915 edition is third in size, but it still omits both of the longest chapters, and thus offers less than half

<sup>44</sup> This figure is arrived at by summing the MSS mentioned in [NCC](#) and in the [NGMCP](#). The real figure could be many scores higher.

the work. For the rest, the evidence is spotty, with each part of the work being supported by only between four and eight manuscripts, excluding the printed editions.

Two sources stand out for their historical importance. The first is no. 3 of 1931, which Ācārya calls “extremely old.” It covered the *śārīrasthāna* only, and unfortunately we know nothing of the later history of this manuscript. The second is no. 3 of 1938, which is one of the important Nepalese manuscripts being considered in the present project. Ācārya’s remarks and references to Hemarājaśarman’s introduction to the *Kāśyapasaṃhitā* allow us to identify this manuscript as MS Kathmandu NAK 5-333.<sup>45</sup> But that manuscript covers the whole work, not just up to the ninth chapter of the *cikitsāsthāna* as Y. T. Ācārya and N. R. Ācārya stated.<sup>46</sup> Perhaps the editors only received collations for this portion of the manuscript and did not know that it was a witness for the whole work.

### The 1939 edition

In 1939, Yādavaśarman Trivikrama Ācārya and Nandakiśora Śarman co-edited an edition of the *sūtrasthāna* of the *Suśrutasamhitā* that was published by the Swami Laxmi Ram ayurvedic centre in Jaipur, and printed at the famous Nirṇayasāgara Press in Mumbai (see Fig. 1).<sup>47</sup> The text was edited on the basis of the following sources.

### For the Bhānumatī

1. A printed edition. Covered the *Bhānumatī* up to chapter Su.sū.40. The siglum was 𑂔 for *mudrita*.<sup>48</sup>

45 Su 1938: 22; Hemarāja Śarman 1938: 56–57. Discussed by Klebanov (2021a: §1.1, 2.3). See also HIML: IIB, 25–41; Wujastyk 2003: 161–169.

46 Su 1938: 22.

47 Su 1939. The description of the sources below is based on Yādavaśarman T. Ācārya’s remarks in his introduction (pp. 3–4). See also the remarks on this edition by Klebanov (2021b: 7). On the Swami Laxmi Ram centre, see Hofer 2007.

48 Sena et al. 1886–93. The manuscript on which this edition was based is probably in the library of the Calcutta Sanskrit College, and described in H. Sastri and Gui 1895–1917: v. X.1, which is not available to me. See also HIML: IB, 495, n. 57 for mention of this manuscript. The reference at Rama Rao et al. 2005: 217 to CACL accession number 97 in Bengali script may be this manuscript.

चरके—“लभोपायो हि शस्तानां रसावीनां रसायनम्” (च. चि. अ. १ पा. १) । पारिशेष्याद्वाजीकरणतन्त्रम् । अवाजिनं वाजीकुर्वन्ति येन तद्वाजीकरणम् । ‘अन्येषामपि दृश्यते’ (पा. अ. ६।३।१३७) इति धीर्घत्वम् । येन वाऽत्यर्थं स्त्रीषु व्यज्यते तद्वाजीकरणम् । तदुक्तं चरके—“येन नारीषु सामर्थ्यं वाजिवल्लभते नरः । प्रजेन्नाप्यधिकं येन वाजीकरणमेव तत्” (च. चि. अ. २, पा. ४) इति ॥ ५ ॥

अथास्य प्रत्येकाङ्गलक्षणसमासः—तत्र, शल्यं नाम विविधतृणकाष्ठ-पाषाणपांशुलोढलोष्टास्थिवालनखपूयास्त्रावदुष्टव्रणान्तर्गर्भशल्योद्धरणार्थं षष्ठ्या विधानैः, यन्त्रशस्त्रक्षाराग्निप्रणिधानव्रणविनिश्चयार्थं च; शालाक्यं नामोर्ध्वजत्रुगतानां श्रवणनयनवदनघ्राणादिसंश्रितानां व्याधीनामुपशमनार्थं; कायचिकित्सा नाम सर्वाङ्गसंश्रितानां व्याधीनां ज्वररक्तपित्तशोफोन्मादापसारकुष्ठमेहातिसारादीनामुपशमनार्थं; भूतविद्या नाम देवांसुरगन्धर्वयक्षरक्षःपितृपिशाचनैरागग्रहाद्युपसृष्टचेतसां शान्तिकर्मबलिहरणादिग्रहोपशमनार्थं; कौमारभृत्यं नाम कुमारभरणघात्रीक्षीरदोषसंशोधनार्थं दुष्टस्तन्यग्रहसमुत्थिनां च व्याधीनामुपशमनार्थम्; अगदतन्त्रं नाम सर्पकीटलृतामूषकादिदृष्टविषव्यञ्जनार्थं विविधविषसंयोगोपशमनार्थं च; रसायनतन्त्रं नाम वयःस्थापनमायुर्मेधावलंकरणं रोगापहरणसमर्थं च; वाजीकरणतन्त्रं नामारूपदुष्टक्षीणशुष्करेतसामाप्यार्थेनप्रसादोपचयजनननिमित्तं प्रहर्षणजननार्थं च ॥ ६ ॥

शल्यग्रविशेषाश्च शालुं प्रतिलक्षणं संक्षेपेणाह—अथास्येत्यादि । एकमेकमङ्गं प्रति लक्षणानां समासः संक्षेपः प्रत्येकाङ्गलक्षणसमासः । तृणादीनां, तथा दुष्टव्रणस्य, तथाऽन्तर्गत(र्भशल्य)स्य उद्धरणार्थमिति प्रत्येकमुद्धरणशब्दः संबध्यते । दुष्टव्रणस्यान्तस्तृणाद्याहरणार्थमित्यन्ये । षष्ठ्या विधानैरिति द्विव्रणीयोचैरपतर्पणाद्यै रक्षाविधानान्तैः; इत्थंभूतलक्षणे तृतीया । जत्रु ग्रीवामूलं, जत्रुण ऊर्ध्वमूर्ध्वजत्रु । घ्राणादीत्यादिग्रहणाच्छिरःकपालादिग्रहणम् । उत्तरतन्त्रे प्रतिपादितक्रमप्राप्त्या ज्वरानन्तरमतीसारः पठितः, तस्यान्ते पाठोऽतिसारस्य सर्वाङ्गीणदोषारब्धत्वात्, अन्येषामपि तन्मध्यपाठेन सर्वाङ्गीणदोषारब्धत्वप्रतिपादनाध्यतिक्रमं वदन्ति । शान्तिकर्म बलिहरणादिना ग्रहाणां देवादीनामुपशमो यस्तदर्थः; यदि वा ग्रहणं ग्रहो देवानामावेशस्तदुपशमार्थम् । दुष्टस्तन्यग्रहसमुत्थितानामिति दुष्टस्तन्येन

१ ‘सर्वशरीरावस्थितानां’ व्याधीनामुपशमकरणार्थं, ज्वरशोफयुग्मरक्तपित्तोन्मादापसार-प्रमेहातीसारादीनां च’ इति ता. । २ ‘देवदानव’ इति ता. । ३ ‘विनायकनागग्रहोप-सृष्टचेतसां’ इति ता. । ४ ‘विषवेगोपशमनार्थं’ इति ता. । ५ ‘शुक्राप्यायन’ इति ता. । ६ ‘घ्राणादीनां शल्यान्तानां’ इति सु. । ७ ‘अन्ये तु तस्यान्ते पाठेन’ इति पा० । ८ ‘ग्रहणाद्’ इति सु. ।

Figure 1: A page of the 1939 *Bhānumatī* edition, showing the variant readings in the footnotes.

2. A manuscript in the India Office Library library provided through the Bhandarkar Oriental Research Institute in Pune.<sup>49</sup> This manuscript covered the *Bhānumatī* b up to the end of the *sūtrasthāna*. The siglum was ह for हस्तलिखित.<sup>50</sup>

### For the *Suśrutasamhitā*

1. A palm leaf manuscript from Hemarājaśarman's personal library.<sup>51</sup> The siglum was ता for ताडपत्र.
2. His own published edition. The siglum was ड for डल्हणसंमतः पाठः.<sup>52</sup>
3. Hārāṇacandra Cakravartī's published edition with his own commentary.<sup>53</sup> The siglum was हा.

### Evaluation

The main innovation of this publication was to present the only surviving part of the commentary on the *Suśrutasamhitā* by the great eleventh-century medical scholar Cakrapāṇidatta, namely the *Bhānumatī*.<sup>54</sup> A secondary purpose was to present the text of the *sūtrasthāna* as read in MS Kathmandu NAK 5-333, that had recently been brought to the editors' attention. In their judgement, the Kathmandu manuscript presented a text that was closer to what Cakrapāṇidatta had before him than the text according to Ḍalhaṇa. This was the first *Suśrutasamhitā* edition in which Ācārya used sigla to identify the sources from which variant readings were reported, so while it has limitations, it for the first time enables us to get some idea of origins of the text (see Figure 1).

Ācārya noted in his introduction that the manuscripts containing the Ḍalhaṇa's commentary all came together with the root-text of the *Suśrutasamhitā*, and thus the main *Suśrutasamhitā* text reflected the readings

49 At this time, manuscripts from Britain were routinely lent to scholars in India and vice versa.

50 Wujastyk 2021  
MS London BL H. T. Colebrooke 908 ([PanditProject #109978](#), consulted on July 03, 2021).

51 I.e., MS Kathmandu NAK 5-333.

52 [Su 1938](#). It is noteworthy that Ācārya refers to his 1938 edition as representing "the Ḍalhaṇa recension."

53 Bhaṭṭācārya 1910-7.

54 [HIML](#): IA, 374-375 and IB, 495-496.

chosen by Ḍalhaṇa. But the manuscripts of the *Bhānumatī* contained the commentary alone, without the root-text, and had many explanations based on different readings of the root-text than those of Ḍalhaṇa. In many of these cases it was hard to know what the text that Cakrapāṇidatta had before him. But Ācārya noted that Cakrapāṇidatta had a text before him that had much in common with the text of the Nepalese manuscript.<sup>55</sup>

There is compelling evidence that Cakrapāṇidatta's *Bhānumatī* commentary once covered the whole text of the *Suśrutasamhitā*.<sup>56</sup> The loss of the rest of the work ranks amongst the greatest disasters in Āyurvedic literature. Remarkably, the whole *Bhānumatī* may still have existed in the early twentieth century. In 1903, Palmyr Cordier reported being privately informed of a complete copy of the work in a personal manuscript collection in Benares.<sup>57</sup>

## Editorial Principles

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<sup>55</sup> Su 1939: 3–4. See discussion by Klebanov (2021b: 7).

<sup>56</sup> HIML: IA, 375.

<sup>57</sup> Cordier 1903: 332.

# The Translation

## Sūtrasthāna, adhyāya 16

- 1 Now we shall expound the method for piercing the ear.<sup>58</sup>
- 2 One may pierce a child's ears for the purpose of preserving and decorating. On renowned days, half days, hours and constellations during the first half of the sixth or seventh lunar month, the boy who has received a benediction (*kṛtamaṅgala*), – blessings pronounced (*svastivācana*)<sup>59</sup> – should be placed on the lap of a wet-nurse.<sup>60</sup> Then, while pacifying him and having pulled his ear with the left hand, the physician should use his right hand to pierce the ear straight through at a naturally occurring

- 58 The topic of piercing the ear (*kaṇṇavyadha*) is not discussed in the *Carakasamhitā* (HIML: IB, 326, n. 175), but it is mentioned in some texts that followed the *Suśruta-samhitā*, such as the *Kaśāpyasamhitā* (HIML: IIA, 30). Also, the instrument for piercing the ear is described in the *Aṣṭāṅgahṛdayasūtra* 1.26.26 (kunt-1902). In the versions of the text known to Ḍalhaṇa (Su 1938: 76) and Cakrapāṇidatta (Su 1939: 125), the heading of this chapter is *kaṇṇavyadhabandhavidhi* ('the method of piercing and joining the ear'), instead of the Nepalese version's *kaṇṇavyadhadhi*. The topic of *kaṇṇabandha* is discussed in passages 17–20 of the Nepalese version. However, it appears that only subsequent redactors reflected its importance by including it in chapter headings. The Nepalese version also omits the opening remark on Dhanvantari that appears in subsequent versions. For a discussion of the frame story in the Nepalese version, see Birch et al. 2021. Ḍalhaṇa (Su 1938: 76) and Cakrapāṇidatta (Su 1939: 125) state that only the ears of healthy people should be pierced, and they quote Bhoja to affirm this: 'When piercing the ears of children who are free of disease at these times, their ear flaps and apertures, as well as limbs, increase' (for the Sanskrit, see Su 1938: 76).
- 59 The syntax here is unclear. The expression *svastivācana* may have been a gloss inserted into the text at an earlier period to clarify *maṅgala*. But as it stands, it is not syntactically connected to the rest of the sentence. In the versions of 1.16.3 known to Cakrapāṇidatta (Su 1939: 126) and Ḍalhaṇa (Su 1938: 76), the words are united in a compound that reads more naturally.
- 60 The versions of 1.16.3 known to Cakrapāṇidatta (Su 1939: 126) and Ḍalhaṇa (Su 1938: 76) have the additional compound *kumāradharāṇike* ('on the lap of one who holds the child') after *dhātṛyaṇike*. The gender of *kumāradhara* is made clear by Ḍalhaṇa's gloss 'a man who holds the child'. Also, both versions add *bālakrīḍanakaiḥ pralobhya* ('having enticed with children's toys') to indicate that the child should be enticed with toys to stay on the assistant's lap. According to Ḍalhaṇa on 1.16.3 (Su 1938: 76), the toys include replica elephants, horses, bulls and parrots. Ḍalhaṇa further mentions that others read *bhakṣyaviśeṣair vā* ('or by special treats') before *bālakrīḍanakaiḥ*.

Revise  
translation  
of participle  
ab-  
hisāntvayamāṇah  
or emend.

- cleft.<sup>61</sup> For a boy, do the right ear first; for a girl, do the left one. Use a needle on a thin ear; an awl (*ārā*) on a thick one.<sup>62</sup>
- 3 If there is excess blood or pain one should know that it was pierced in the wrong place. The absence of side-effects is a sign that it has been pierced in the right place.<sup>63</sup>
- 4 In this context, if an ignorant person accidentally pierces a duct (*sirā*) there will be fever, burning, swelling (*śvayathu*), pain, lumps (*granthi*), paralysis of the nape of the neck (*manyāstambhā*), convulsions (*apatānaka*), headache or sharp pain in the ear.<sup>64</sup>
- 5 Having removed the wick (*varti*) in the hole because of the aggravation of humours or a culpable piercing,<sup>65</sup> one should smear it with a paste of the roots of barley, liquorice, Indian madder (*mañjiṣṭhā*), and the castor oil tree (*gandharvahasta*), thickened with honey and ghee. When it has healed well, one should pierce it again.

ADD  
PRIMARY  
REF)

- 61 The versions of 1.16.3 of Cakrapāṇidatta ([Su 1939](#): 126) and Ḍalhaṇa ([Su 1938](#): 76) add *ādityakarāvabhāsite* to clarify that this naturally occurring cleft is illuminated by sunshine.
- 62 Ḍalhaṇa on 1.16.3 ([Su 1938](#): 76) clarifies that the awl is a shoe-maker's knife for piercing leather.
- 63 At this point, MS Kathmandu KL 699 is missing a folio, so the rest of this chapter is constructed on the basis of witnesses MS Kathmandu NAK 5-333 and MS Kathmandu NAK 1-1079.
- 64 This passage is significantly augmented in 1.16.4 of Cakrapāṇidatta's version ([Su 1939](#): 126) and 1.16.5 of Ḍalhaṇa's ([Su 1938](#): 77) to outline the specific problems caused by piercing three ducts called *kālikā*, *marmikā* and *lohitikā*. In fact, the order of the problems mentioned in the Nepalese version has been retained in the other versions and divided between each duct. Cakrapāṇidatta's commentary on 1.16.4 ([Su 1939](#): 126) cites several verses attributed to Bhoja on the problems caused by piercing these three ducts in the ear flap: 'Lohitikā, marmikā and the black ones are the ducts situated in the earflaps. Listen in due order to the problems that arise when they are pierced. Paralysis of the nape of the neck and convulsions, or sharp pain arise from piercing *lohitikā*. Pain and lumps are thought to arise from piercing *marmikā*. Piercing *kālikā* gives rise to swelling, fever and burning.'
- 65 In addition to these reasons, 1.16.5 of Cakrapāṇidatta's version ([Su 1939](#): 126–127) and 1.16.6 of Ḍalhaṇa's ([Su 1938](#): 77) add *kliṣṭajihmāpraśastasūcīvyadhāt* ('because of piercing with a painful, crooked and unrecommended needle') and *gāḍhataravartitvāt* ('because of a wick that is too thick'). Ḍalhaṇa was aware of the reading in the Nepalese version because he notes in his commentary on 1.16.6 ([Su 1938](#): 77) that some read 'because of the accumulation of humours' rather than 'because of piercing with a painful, crooked and unrecommended needle or because of a wick that is too thick.' On the meaning of *samudāya*, see ?? and Meulenbeld [1992](#): 1–5.



- 6 One should treat the properly-pierced ear by sprinkling it with raw sesame oil. After every three days one should apply a thicker wick (*varti*) and sprinkle oil right on it.<sup>66</sup>
- 7 Once the ear is free from humours or side-effects, one should loosen it with a light dilator (*pravardhanaka*) in order to enlarge it.<sup>67</sup>
- 8 A person's ear enlarged in this way can split in two, either as a result of the humours<sup>68</sup> or a blow. Listen to me about the joins (*sandhāna*) it can have.
- 9 Here, there are, in brief, fifteen ways of mending the ear flap.<sup>69</sup> They are as follows: Rim-join (*nemīsandhānakaḥ*), Lotus-splittable (*utpalabhedyaka*), Dried Flesh (*vallūraka*), Fastening (*āsaṅgima*), Cheek-ear (*gaṇḍakarṇa*), Take away (*āhārya*), Ready-Split (*nirvedhima*), Multi-joins (*vyāyojima*), Door-hinge (*kapāṭasandhika*), Half door-hinge (*ardhakapāṭasandhika*), Compressed (*saṃkṣipta*), Reduced-ear (*hīnakarṇa*), Creeper-ear (*vallīkarṇa*), Stick-ear (*yaṣṭīkarṇa*), and Crow's lip (*kākaṣṭha*).<sup>70</sup>

In this context, among these,

“Rim-join” (*nemīsandhānaka*): both flaps are wide, long, and equal.

“Lotus-splittable” (*utpalabhedyaka*): both flaps are round, long, and equal.

“Dried flesh” (*vallūraka*): both flaps are short, round, and equal.

“Fastening” (*āsaṅgima*): one flap is longer on the inside.

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- 66 The manuscripts support the reading *sthūlatarīm* that is either a non-standard form or a scribal error.
  - 67 Cakrapāṇidatta on 1.16.6 (Su 1939: 127) and Ḍalhaṇa on 1.16.8 (Su 1938: 77) point out that the dilator can be made of wood, such as that of the prickly chaff flower (*apāmarga*), the neem tree (*nimba*) and the cotton plant (*kārpāsa*). Ḍalhaṇa adds that it can also be made of lead (*sīsaka*) and should have the shape of the datura flower (*dhattūrapuṣpa*).
  - 68 Ḍalhaṇa on 1.16.9 (Su 1938: 77) notes that the word *doṣa* here can refer to either a humour, such as wind (*vāta*), as we have understood it, or a disease generated from a humour.
  - 69 The Nepalese version uses the word *sandhāna* to refer to joining a split in an ear flap, which is consistent with the terminology in the verse cited above (8). However, 1.16.10 of Ḍalhaṇa's version (Su 1938: 77) uses the term *bandha* here and at the very beginning of the chapter (i.e., 1.16.1) to introduce the topic of repairing the ear.
  - 70 For an artist's impression of these different kinds of joins in the ear flap, see Majno 1975: 290 (reproduced as Figure 3.2 in Wujastyk 2003: 154).

“Cheek-ear” (*gaṇḍakarna*): one flap is longer on the outside.<sup>71</sup>

“Take-away” (*āhārya*): the flaps are missing, in fact, on both sides.

“Ready-split” (*nirvedhima*): the flaps are like a dais (*pīṭha*).

“Multi-joins” (*vyāyojima*): one flap is small, the other thick, one flap is equal, the other unequal.

“Door-hinge” (*kapāṭasandhika*): the flap on the inside is long, the other is small.

“Half door-hinge” (*ardhakapāṭasandhika*): the flap on the outside is long, the other is small.

“These ten options (*vikalpa*) for joins (*sandhi*) of the ear should be bound. They can mostly be explained as resembling their names.<sup>72</sup> The five from compressed (*saṃkṣipta*) on are incurable.<sup>73</sup> Among these, “compressed” has a dry ear canal and the other flap is small. “Reduced ear” has flaps that have no base and have wasted flesh on their edges. “Creeper-ear” has flaps that are thin and uneven. “Stick-ear” has lumpy (*granthita*) flesh and the flaps are stretched thin and have stiff (*stabdha*) ducts (*sirā*). “Crow-lip” has a flap without flesh with compressed (*saṃkṣipta*) tips and little blood. Even when they are bound up, they do not heal because they are hot, inflamed, suppurating (*srāva*), or swollen.<sup>74</sup>

71 For an artist’s impression of this join, see Majno 1975: 291 (reproduced as Figure 3.3 in Wujastyk 2003: 155).

72 Cakrapāṇidatta on 1.16.9–13 (Su 1939: 128–129) and Ḍalhaṇa on 1.16.10 (Su 1938: 77–78) provide examples of how the names of these joins describe their shapes. For example, the rim-join (*nemīsandhānaka*) is similar to the join of the rim of a wheel (*cakradhārā*).

73 Ḍalhaṇa on 1.16.10 (Su 1938: 77–78) mentions that some do not read the statement that only five are incurable, and they understand the causes of unsuccessful joins given below (i.e., heat, inflammation, suppuration and swelling) as also pertaining to the first ten when they do heal.

74 The version of 1.16.11–13 known to Ḍalhaṇa (Su 1938: 78) has four verses (*śloka*) at this point that are not in the Nepalese manuscripts. The additional verses iterate the types of joins required for ear flaps that are missing, elongated, thick, wide, etc. All four verses were probably absent in the version of the *Suśrutasaṃhitā* known to Cakrapāṇidatta. He cites the verses separately in his commentary, the *Bhānumatī* (Su 1939: 128–129), introducing each one as ‘some people read’ (*ke cit paṭhanti*). How-

- 10 A person wishing to perform any of these joins should therefore have supplies prepared according to the recommendations of the ‘Preparatory Supplies’ chapter.<sup>75</sup> And in this regard, he should particularly gather<sup>76</sup> decanted liquor (*surāmaṇḍa*), milk, water, fermented rice-water (*dhānyāmla*), and powdered earthenware crockery (*kapālacūrṇa*).<sup>77</sup>

Next, having made the woman or man tie up the ends of their hair, eat lightly and be firmly held by qualified attendants, one considers the joins (*bandha*) and then applies them by means of cutting (*chedya*), splitting (*bhedya*), scarification (*lekhyā*), or piercing (*vyadhana*).<sup>78</sup> Next, he should examine the blood of the ear to know whether it is tainted (*duṣṭa*) or not. If it is tainted by wind, the ear should be bathed with fermented rice-water (*dhānyāmla*) and water; if tainted by choler, then cold water and milk should be used; if tainted by phlegm, then decanted liquor (*surāmaṇḍa*) and water should be used, and then he should scarify it again.

Then, arranging the join in the ear so that it is neither proud, depressed, nor uneven, one should make the join. Having seen that the blood has stopped, one should anoint it with honey and ghee, bandage each ear with cotton (*picu*) and gauze (*prota*), and bind it up with a thread, neither too tightly nor too loosely. Then, the earthenware powder should be sprinkled on, and medical advice (*ācārika*) given. And he should supplement with food as taught in the ‘Two Wound’ chapter.<sup>79</sup>

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ever, in Trikamajī Ācārya’s edition of the *Sūtrasthāna* of the *Bhānumatī*, the root text is largely identical to the one commented on by Ḍalhaṇa (Su 1938), even in instances like this where Cakrapāṇidatta’s commentary indicates that he was reading a different version of the *Suśrutasamhitā*.

75 *Suśrutasamhitā* 1.5 (Su 1938: 18–23).

76 The reading in the Nepalese manuscripts of *viśeṣataś cāgropaharaṇīyāt* has been emended to *viśeṣataś cātropaharet* to make sense of the list of ingredients, which is in the accusative case. Also, the repetition of *agropaharaṇīyāt* in the Nepalese version suggests that its second occurrence, which does not make good sense here, is a dittographic error.

77 The term *kapālacūrṇa* is unusual. Ḍalhaṇa (Su 1938: 79) defines it as the powder of fragments of fresh earthen pots and Cakrapāṇidatta (Su 1939: 129) as the powder of earthenware vessels.

78 There are syntactic difficulties in this sentence. We have adopted the reading in Ḍalhaṇa’s version (Su 1938: 78), which has *ca kṛtvā* following *supariḡhṛtaṃ*. It is likely that a verb, such as *kṛtvā*, dropped out of the Nepalese transmission.

79 *Suśrutasamhitā* 4.1 (Su 1938: 396–408).

- 11 One should avoid rubbing, sleeping during the day, exercise, overeating, sex, getting hot by a fire, or the effort of speaking.
- 12 One should not make a join when the blood is too pure, too copious, or too thin.<sup>80</sup> For when the ear is tainted by wind, then it is obstructed by blood (*raktabaddha*), unhealed and will peel. When tainted with choler, it becomes pinched (*gāḍha*), septic (*pāka*) and red. When tainted by phlegm, it will be stiff (*stabdha*) and itchy. It has excessively copious suppuration (*srāva*) and is śopha (*puffed up*). It has a small amount of wasted (*kṣīṇa*) flesh and it will not grow.<sup>81</sup>
- 13 When the ear is properly healed and there are no complications, one may very gradually start to expand it. Otherwise, it may be inflamed (*saṃrambha*), burning, septic or painful. It may even split open again.
- 14 Now, massage for the healthy ear, in order to enlarge it. One should gather as much as one can the following: a monitor lizard (*godhā*, scavenging (*pratuda*) and seed-eating (*viṣkira*) birds, and creatures that live in marshes or water,<sup>82</sup> fat, marrow, milk, and sesame oil, and white mustard oil.<sup>83</sup> Then cook the oil with an admixture (*prativāpa*) of the following: purple calotropis (*arka*, white calotropis (*alarka*, country mallow (*balā*, ‘strong Indian mallow’ (*atibalā*, country sarsaparilla (*anantā* beggarweed (*vidāri*, liquorice (*madhuka*), hornwort (*jalaśūka* → *jalanīlikā*<sup>84</sup>), items having the ‘sweet’

80 1.16.17 of Ḍalhaṇa’s version (Su 1938: 79) reads “impure” for the Nepalese “too pure,” which would appear to make better medical sense. Emending the text to *nāśuddha*- for *nāśuddha*- in the Nepalese recension would yield the same meaning as the Ḍalhaṇa’s version.

81 In his edition of *Suśrutasamhitā*, Ācārya (Su 1938: 79 n. 1) includes in parentheses the following treatment for these conditions, which according to a footnote is not found in the palm-leaf manuscript he used: ‘One should sprinkle it with raw sesame oil for three days and one should renew the cotton bandage after three days’ (*āmatailena trirātram pariṣecayet trirātrāc ca picuṃ parivartayet*).

82 For such classifications, see Zimmermann (1999) and Smith (1994).

83 1.16.19 of Ḍalhaṇa’s version (Su 1938: 79) includes ghee (*sarpis*). However, Ḍalhaṇa’s remarks on 1.16.19 and Cakrapāṇidatta’s on 1.16.18 (Su 1939: 130) indicate that they knew a version of this recipe (perhaps, similar to the Nepalese) that does not have ghee. Ḍalhaṇa also notes that others simply read four oils, beginning with fat and without milk, whereas Cakrapāṇidatta says some read that it is made with four oils and milk.

84 *Ceratophyllum demersum*, L. This name is not certain. In fact, Ḍalhaṇa on 1.16.19 (Su 1938: 79) notes that some people interpret it as a poisonous, hairy, air-breathing, underwater creature.

- savour (*madhuravarga*<sup>85</sup>) and ‘milk flower’ (*payasyā* → *vidārī*<sup>86</sup>). This should then be deposited in a well-protected spot.
- 15 The wise man who has been sweated should rub the massaged (*ma-  
rdita*) ear with it. Then it will be free of complications, and will enlarge  
properly and be strong.<sup>87</sup>
- 16 Ears which do not enlarge even when sweated and oiled, should be  
scarified at the edge of the hole (*apāṅga*), but not outside it.<sup>88</sup>
- 17 In this tradition, experts know countless repairs to ears. So a physi-  
cian who is very intent (*suniviṣṭa*) on working in this way may repair  
(*yojayed*) them.<sup>89</sup>
- 18 If an ear has grown hair, has a nice hole, a firm join, and is strong and  
even, well-healed, and free from pain, then one can enlarge it slowly.<sup>90</sup>
- 19 Now I shall describe the proper method of repairing a severed nose.  
First, take from the trees a leaf the same size as the man’s nose and  
hang it on him.

85 The items which exemplify the ‘sweet’ savour (*madhuravarga*) are enumerated at SS.1.42.11.

86 *Pueraria tuberosa* (Willd.) DC. The version of 1.16.19 known to Ḍalhaṇa (Su 1938: 79) adds several ingredients to this admixture, including *apāmārga*, *aśvagandhā*, *kṣīraśuklā*, *madhuravarga* and *payasyā*. Also, it has *vidāriḡandhā* instead of *vidārī*. When commenting on 1.16.19, Ḍalhaṇa (Su 1938: 79) notes that some do not read *madhuravarga* and *payasyā*. Therefore, there were probably other versions of this recipe with fewer ingredients, as seen in the Nepalese version.

87 For these aims (i.e., healing and enlarging the ear), the text known to Ḍalhaṇa (Su 1938: 79) has an additional verse and a half describing an ointment for rubbing the ear (*udvartana*) and sesame oil (*taila*) cooked with various medicines for massage. Cakrapāṇidatta (Su 1939: 131) does not comment on these verses, nor verse 15 of the Nepalese version, and so the version of the *Suśrutasamhitā* known to him may not have included them.

88 Ḍalhaṇa’s version of 1.16.23 adds another hemistich that states more explicitly that the scarification should not be done on the outside of hole as it will cause derangement.

89 After verse 17, the 1938 edition of Ācārya (Su 1938: 80) has in parentheses nineteen verses on diseases of the ear lobes, treatments and complications. It is possible that these verses were in some of the witnesses used by Ācārya to construct the text as they occur in other manuscripts, such as MS Hyderabad Osmania 137-3 (b). However, Cakrapāṇidatta (Su 1939: 132) and Ḍalhaṇa (Su 1938: 80) state that some read about the diseases of the ear lobes in this chapter whereas others read about them in the chapter on various treatments (*miśrakacikitsa*) (SS 5.25), which does indeed begin with a discussion of the disease *paripoṭa*. Ḍalhaṇa goes on to say that some believe that these verses were not composed by sages and, therefore, do not read them.

90 The order of verses 17 and 18 are reversed in Ḍalhaṇa’s version (Su 1938: 80).

- 20 Next, having cut a slice of flesh (*vadhra*)<sup>91</sup> with the same measurements off the cheek, the end of the nose is then scarified.<sup>92</sup> Then the diligent (*apramatta*) physician, should quickly put it back together so that it is well joined (*sādhubaddha*).
- 21 Having carefully observed that it has been well sown up, two tubes should be fixed in place.<sup>93</sup> Then, having lifted them up,<sup>94</sup> the powder of sappanwood (*pattāṅga*),<sup>95</sup> liquorice and Indian barberry.<sup>96</sup> should be applied to it.
- 22 The wound should be covered properly with cotton (*picu*) and should be moistened repeatedly with sesame oil. Ghee should be given to the man to drink. His digestion being complete, he should be oiled and purged in accordance with the instructions specific to him.<sup>97</sup>
- 23 And once healed and really come together, what is left of that slice of flesh (*vadhra*) should then be trimmed. If it is reduced (*hīna*), however, one should make an effort to stretch it, and one should make its overgrown flesh smooth.<sup>98</sup>

añjana

- 91 The version of 1.16.28b known to Ḍalhaṇa (*Su* 1938: 81) reads bound, connected (*baddham*) instead of slice of flesh (*vadhra*). This is a critical variant from the surgical point of view. If the slice remains connected, it will have a continuing blood supply. This is one of the effective techniques that so astonished surgeons witnessing a similar operation in Pune in the eighteenth century (see Wujastyk 2003: 67–70).
- 92 Or 1.16.20 could be mean, ‘... off the cheek, it is fixed to the end of the nose, which has been scarified.’ Unfortunately, the Sanskrit of the Nepalese version is not unambiguous on the important point of whether or not the flap of grafted skin remains connected to its original site on the cheek. However, Ḍalhaṇa (*Su* 1938: 81) clarifies the meaning of the vulgate here by stating that one should supply the word ‘flesh’ when reading ‘connected,’ thus indicating that he understood the flesh to be connected to the face.
- 93 Ḍalhaṇa notes that the two tubes should be made of reed (*nala*) or the stalk of the leaf of castor oil plant (*eraṇḍapatranāla*) (on 1.16.21 (*Su* 1938: 81)). They should not be made of lead or betel nut because the weight will cause them to slip down.
- 94 The Sanskrit term *unnāmayitvā* in 1.16.21 is non-Pāṇinian.
- 95 *Caesalpinia sappan*, L. For *pattāṅga* there are manuscript variants *pattrāṅga* (MS Kathmandu NAK 5-333) and *pattāṅga* (MS Kathmandu NAK 1-1079). Also, MS Kathmandu KL 699 (f. 14r:1) has *pattrāṅga* in a verse in 1.14 (cf. 1.14.36 (*Su* 1938: 66)). The text known to Ḍalhaṇa has *pataṅga* (1.16.29 (*Su* 1938: 81)) and this term is propagated in modern dictionaries.
- 96 *Berberis aristata*, DC. Ḍalhaṇa understands it as elixir salve (*rasāñjana*) (*Su* 1938: 81).
- 97 The expression *svayathopadeśa* is ungrammatical but supported in all available witnesses.
- 98 Ḍalhaṇa accepts a verse following this, which points out that the procedure for joining



## Abbreviations

- Ah 1939 Kumṭe, Aṇṇā Moreśvara, Navare, Kṛṣṇaśāstrī, and Parādkar, Hariśāstrī (1939) (eds.), श्रीमद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, श्रीमद-रुणदत्तविरचितया सर्वाङ्गसुन्दराख्यया व्याख्यया, हेमाद्रिप्रणीतया आयुर्वेद-सायनाह्वया टीकया च समुल्लसितम् = *The Astāṅgahṛidaya* (6th edn., Mumbayyām: Nirṇayasāgara Press), [ark:/13960/t3tt6967d](https://nirṇayasāgara.org/ark:/13960/t3tt6967d).
- Anup *Anup Sanskrit Library* (n.d.).
- AS *Asiatic Society* (n.d.).
- As 1980 Āṭhavale, Anaṃta Dāmodara (1980) (ed.), *Aṣṭāṅgasaṅgrahaḥ. Śrīmad Vṛddhavāgbhaṭaviracitaḥ Induvyākhyāsahitaḥ* (Pune: Maheśa Anaṃta Āṭhavale, Śrīmad Ātreya Prakāśanam), [ark:/13960/t9773bb9z](https://nirṇayasāgara.org/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](https://nirṇayasāgara.org/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 संवलित्ता (3rd edn., Mumbayyām: Nirṇaya Sagara Press), [URL](https://nirṇayasāgara.org/URL), accessed 01/01/2018.
- HIML Meulenbeld, Gerrit Jan (1999–2002), *A History of Indian Medical Literature*, 5 vols. (Groningen: E. Forsten), ISBN: 9069801248.

the nose is similar to that of joining the lips without fusing the ducts (Su 1938: 81). He notes that earlier teachers did not think this statement on the nose and lips was made by sages, but includes it because it was accepted by Jejjāta, Gayadāsa and others. However, Cakrapāṇidatta does not comment on this additional verse, which suggests that either he did not know of it or was not inclined to accept it (Su 1939: 133).



- KL *Kaiser Library* (n.d.).
- 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 NGMCP (2014), 'Nepal-german Manuscript Cataloguing Project. Online Title List and Descriptive Catalogue', Universität Hamburg and Deutsche Forschungsgemeinschaft, [URL](#).
- RORI *Rajasthan Oriental Research Institute* (n.d.).
- Su 1889 Bhaṭṭācāryya, Jivānanda Vidyāsāgara (1889) (ed.), सुश्रुतः. सूत्र-निदान-शारीर-चिकित्सा-कल्पोत्तर-तन्त्र-कल्पित आयुर्वेद. भगवता धन्वन्तरिणोपदिष्टः सुश्रुतनामधेयेन तच्छिष्येण विरचितः (3rd edn., Calcutta: Saratī Press), [ark : / 13960 / t1nh6j09c](#); [HIML](#): IB, 311, edition b.
- Su 1915 Ācārya, Yādavaśarma Trivikrama (1915) (ed.), सुश्रुतसंहिता, सुश्रुतेन विरचिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लसिता, आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = *The Sushrutasamhita of Sushruta, the Nibandhasangraha Commentary of Shri Dalhanāchārya* (Mumbayyām: Nirṇayasāgaramudrāyantrālaye), [ark : / 13960 / t3sv0mt50](#), accessed 29/07/2020; [HIML](#): IB, 312 edition \*v.
- Su 1931 Ācārya, Yādavaśarma Trivikrama (1931) (ed.), सुश्रुतसंहिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लसिता, महर्षिणा सुश्रुतेन विरचिता, सूत्र-निदान-शारीर-चिकित्सा-कल्पस्थानोत्तरतन्त्रात्मकः. आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = *The Sushrutasamhitā of Sushruta with the Nibandhasangraha Commentary of Shree Dalhanāchārya* (2nd edn., Mumbayyām: Pāṇḍuraṅga Jāvājī at the Nirṇayasāgaramudrāyantrālaye), [ark : / 13960 / t9j41sg94](#), accessed 09/06/2020; [HIML](#): IB, 312 edition \*v.

- Su 1938 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 1938<sup>2</sup> Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (2004) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता,  
श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्री-  
गयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता  
(Vārāṇasī: Caukhambhā Kṛṣṇadāsa Akādamī); Reprint of  
the third, 1938 edition ([Su 1938](#)).
- Su 1939 Ācārya, Yādavaśarma Trivikrama and Śarman, Nandakiśora  
(1939) (eds.), सुश्रुतसंहितायाः सूत्रस्थानम्. श्रीचक्रपाणिदत्तविरचितया  
भानुमतीव्याख्याया समेतम् = *Sushrut-saṁhitā (sūtra Sthān) with  
Bhānumatī Commentary by Chakrapāṇi Datta with Introduction  
by Gaṇanāth Sen (Śrīsvāmi Lakṣmīrāma Nidhi Grantha-  
mālā = Shrī Swāmī Lakshmī Rām Trust Series, 1; [Jaipur]:  
Śyāmasundara Śarman)*, [ark : / 13960 / t54g0d12m](#); Printed at  
the Nirṇayasāgara Press, Bombay.
- Su 1945 Ācārya, Yādavaśarma Trivikramācārya and Ācārya, Nārāy-  
aṇa Rāma (1945) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता  
(मूलमात्रा). पाठान्तर-परिशिष्टादिभिः संवलिता = *the Suśrutasaṁhitā  
of Suśruta with Various Readings, Notes and Appendix etc.*  
(Mumbāi: Nirṇayasāgarākhyamudraṇālaye), [URL](#).
- TMSSML *Tanjore Maharaja Serfoji Saraswati Mahal Library* (n.d.).
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## Glossary

<i>ācārika</i> medical advice 25	compressed <i>saṃkṣipta</i> 24	<i>apāṅga</i> 27
admixture <i>prativāpa</i> 26	compressed <i>saṃkṣipta</i> 23	elixir salve <i>rasāñjana</i> 28
<i>āhārya</i> take away 23	convulsions <i>apatānaka</i> 22	<i>eraṇḍapatranāla</i> stalk of the leaf of castor oil plant 28
<i>apāmarga</i> prickly chaff flower 23	cotton <i>picu</i> 25	fastening <i>āsaṅgima</i> 23
<i>apāṅga</i> edge of the hole 27	cotton plant <i>kārpāsa</i> 23	fermented rice-water <i>dhānyāmla</i> 25
<i>apatānaka</i> convulsions 22	creeper-ear <i>vallīkarṇa</i> 23	<i>gāḍha</i> pinched 26
<i>apramatta</i> diligent 28	crow's lip <i>kākauṣṭha</i> 23	<i>gaṇḍakarṇa</i> cheek-ear 23
<i>ārā</i> awl 22	cutting <i>chedya</i> 25	<i>gandharvahasta</i> castor oil tree 22
<i>ardhakaṇḍapāṭasandhika</i> half door-hinge 23	dais <i>pīṭha</i> 24	gauze <i>prota</i> 25
<i>āsaṅgima</i> fastening 23	datura flower <i>dhattūrapuṣpa</i> 23	ghee <i>sarpis</i> 26
awl <i>ārā</i> 22	decanted liquor <i>surāmaṇḍa</i> 25	<i>granthi</i> lumps 22
<i>baddham</i> bound, connected 28	<i>dhānyāmla</i> fermented rice-water 25	<i>granthita</i> lumpy 24
<i>bandha</i> joins 25	<i>dhattūrapuṣpa</i> datura flower 23	half door-hinge <i>ardhakaṇḍapāṭasandhika</i> 23
<i>bhedya</i> splitting 25	dilator <i>pravardhanaka</i> 23	<i>hīna</i> reduced 28
blessings pronounced <i>svastivācana</i> 21	diligent <i>apramatta</i> 28	<i>hīnakarṇa</i> reduced-ear 23
bound, connected <i>baddham</i> 28	door-hinge <i>kaṇḍapāṭasandhika</i> 23	indian madder <i>mañjiṣṭhā</i> 22
<i>cakradhārā</i> rim of a wheel 24	dried flesh <i>vallūraka</i> 23	inflamed <i>saṃrambha</i> 26
castor oil tree <i>gandharvahasta</i> 22	duct <i>sirā</i> 22	joins <i>bandha</i> 25
<i>chedya</i> cutting 25	ducts <i>sirā</i> 24	<i>sandhāna</i> 23
cheek-ear <i>gaṇḍakarṇa</i> 23	<i>duṣṭa</i> tainted 25	<i>sandhi</i> 24
	edge of the hole	

*kākauṣṭha*  
 crow's lip 23  
*kapālacūrṇa*  
 powdered  
 earthenware  
 crockery 25  
*kapāṭasandhika*  
 door-hinge 23  
*kaṇnavyadha*  
 piercing the ear 21  
*kārpāsa*  
 cotton plant 23  
*kṛtamaṅgala*  
 received a  
 benediction 21  
*kṣīṇa*  
 wasted 26  
 lead  
*sīsaka* 23  
*lekhyā*  
 scarification 25  
 lotus-splittable  
*utpalabhedyaka* 23  
 lumps  
*granthi* 22  
 lumpy  
*granthita* 24  
*mañjiṣṭhā*  
 indian madder 22  
*manyāstambhā*  
 paralysis of the  
 nape of the neck 22  
*mardita*  
 massaged 27  
 massaged  
*mardita* 27  
 may repair  
*yojayed* 27  
 medical advice  
*ācārīka* 25  
*mīśrakacikitsa*  
 various treatments  
 27  
 multi-joins

*vyāyojima* 23  
*nala*  
 reed 28  
 neem tree  
*nimba* 23  
*nemīsandhānaka*  
 rim-join 24  
*nemīsandhānakāḥ*  
 rim-join 23  
*nimba*  
 neem tree 23  
*nirvedhima*  
 ready-split 23  
 obstructed by blood  
*raktabaddha* 26  
 ointment for rubbing  
 the ear  
*udvartana* 27  
 options  
*vikalpa* 24  
*pāka*  
 septic 26  
 paralysis of the nape of  
 the neck  
*manyāstambhā* 22  
*pattāṅga*  
 sappanwood 28  
*picu*  
 cotton 25  
 piercing the ear  
*kaṇnavyadha* 21  
 piercing  
*vyadhana* 25  
 pinched  
*gāḍha* 26  
*pīṭha*  
 dais 24  
 powdered earthenware  
 crockery  
*kapālacūrṇa* 25  
*prativāpa*  
 admixture 26  
*pratuda*

scavenging 26  
*pravardhanaka*  
 dilator 23  
 prickly chaff flower  
*apāmarga* 23  
*prota*  
 gauze 25  
 puffed up  
*śopha* 26  
*raktabaddha*  
 obstructed by  
 blood 26  
*rasāñjana*  
 elixir salve 28  
 ready-split  
*nirvedhima* 23  
 received a benediction  
*kṛtamaṅgala* 21  
 reduced  
*hīna* 28  
 reduced-ear  
*hīnakarṇa* 23  
 reed  
*nala* 28  
 rim of a wheel  
*cakradhārā* 24  
 rim-join  
*nemīsandhānaka* 24  
 rim-join  
*nemīsandhānakāḥ* 23  
*sādhubaddha*  
 well joined 28  
*saṃkṣipta*  
 compressed 24  
 compressed 23  
*saṃrambha*  
 inflamed 26  
*sandhāna*  
 joins 23  
*sandhi*  
 joins 24  
 sappanwood  
*pattāṅga* 28  
*sarpis*

ghee 26  
 scarification  
   *lekhyā* 25  
 scavenging  
   *pratuda* 26  
 seed-eating  
   *viṣkira* 26  
 septic  
   *pāka* 26  
 sesame oil  
   *taila* 27  
*sirā*  
   duct 22  
   ducts 24  
*sīsaka*  
   lead 23  
 slice of flesh  
   *vadhra* 28  
*śopha*  
   *puffed up* 26  
 splitting  
   *bhedya* 25  
*srāva*  
   suppurating 24  
   suppuration 26  
*stabdha*  
   stiff 24, 26  
 stalk of the leaf of castor  
   oil plant  
     *eraṇḍapatranāla* 28  
 stick-ear  
   *yaṣṭikarṇa* 23  
 stiff

*stabdha* 24, 26  
*suniviṣṭa*  
   very intent 27  
 suppurating  
   *srāva* 24  
 suppuration  
   *srāva* 26  
*surāmaṇḍa*  
   decanted liquor 25  
*svastivācana*  
   blessings  
   pronounced 21  
*śvayathu*  
   swelling 22  
 swelling  
   *śvayathu* 22  
*taila*  
   sesame oil 27  
 tainted  
   *duṣṭa* 25  
 take away  
   *āhārya* 23  
*udvartana*  
   ointment for  
   rubbing the ear 27  
*utpalabhedyaka*  
   lotus-splittable 23  
*vadhra*  
   slice of flesh 28  
*vallikarṇa*

creeper-ear 23  
*vallūraka*  
   dried flesh 23  
 various treatments  
   *miśrakacikitsa* 27  
*varti*  
   wick 22f  
*vāta*  
   wind 23  
 very intent  
   *suniviṣṭa* 27  
*vikalpa*  
   options 24  
*viṣkira*  
   seed-eating 26  
*vyadhana*  
   piercing 25  
*vyāyojima*  
   multi-joins 23  
 wasted  
   *kṣīṇa* 26  
 well joined  
   *sādhubaddha* 28  
 wick  
   *varti* 22f  
 wind  
   *vāta* 23  
*yaṣṭikarṇa*  
   stick-ear 23  
*yojayed*  
   may repair 27