HISTORICAL NOTE





Jvaranirnaya: a rare monograph on diagnosis of fevers from the pre-colonial era

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Abstract

In *Ayurveda*, manuscripts in the form of monographs dealing with only one disease are rare and *Jvaranirnaya* is one such rare monograph dealing exclusively with types of *jvara* (fevers) but currently unavailable. This treatise belongs to sixteenth century CE and is written by Sri Nārāyaṇa Paṇḍita. The out of print monograph is available without any language translation or commentary but is complete, readable, in *Devanāgarī* script and with 365 verses divided into five sections. The uniqueness of the text is that one can get a comprehensive classification, symptomatology and diagnosis of *jvara*, all at one place in this text. The context of fever caused due to the vitiation of all the three *doşas* (*sannipāta jvara*) is elaborated in great detail and dealt exclusively as a separate chapter. The description of types of pacifications (*upaśaya*) is explained with examples. The concept of "*prakṛti samā samavētā and vikṛti viṣama samavēta*" and bad omen (*ariṣta lakṣaṇā*) related to the symptoms are some of the other interesting aspects of the text. These features of the monograph make it worth exploring further. It needs to be critically studied, translated and made available.

Keywords Ayurveda manuscript · Jvaranirnaya · Monograph · Sannipāta jvara · Sri Nārāyana Pandita

1 Introduction

The references to fevers (*jvara*) can be traced right from the period of veda and purāņa and are extensively mentioned throughout. The causes of its occurrence and the treatments are mentioned in different contexts and this gives jvara a historical importance (Prasad, 2001). All the canonical Avurvedic treatises like Caraka Samhitā (Acharya, 2013, p.193), Suśruta Samhitā (Acharya, 2007a, 2007b, p.670), Astānga Hrdava (Paradakara, 2016, p.543) and Astānga Sangraha of Vagbhata also give utmost importance to jvara and have dealt with very elaborately. Jvara is considered to be the most prime of all the diseases (Paradakara, 2016, p.447) which invariably afflicts all the age groups of people. Even though jvara as a disease is described in detail, the description of sannipāta (a manifestation of jvara caused due to vitiation of tridosas) are very limited (Panja et al. 2011) and this condition also happens to be the most difficult forms of jvara to be treated. The elaborate "tridoșaja prakaraņa"

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Jvaranirņaya (Pandita, 1963) is a manuscript of a monograph in Devanāgarī lipī in complete and available in readable form. Monographs in Ayurveda are very rare and it is usually a spectrum of diseases or systems which are included as a whole in the composition of treatises in Ayurveda. For example, the Caraka Samhitā encompasses the spectrum of diseases which are related to general medicine (kāya cikitsa pradhāna), where as Suśruta Samhitā mainly deals with diseases related to the domain of surgery (śalya tantra pradhāna) and Kāśyapa Samhitā (Sharma, 2019) chiefly deals with paediatric, gynaecological and obstetric conditions (bāla & strī roga).

Therefore, these unique features of the monograph make it worth exploring. Moreover, this paper monograph is not translated into any language nor is critically analysed and remains out of print. Hence, it becomes imperative that this monograph be worked on to bring out distinct aspects of the treatise. This will in turn help in contributing to the literary richness of *Ayurveda* and for better readership.

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Sl. No	Sections (Prakaraņa)	Core contents	Verse No
1	Upotghāta prakaraṇa	Roga parīkṣa, Ṣaṭ nidāna	1-40
2	Pŕthakjāta prakaraņa	Nidāna, Pūrvarūpa, Lakṣaṇa and types	1–62
3	Dvandvaja prakarana	Explains types of Dvandva jvara	1–25
4	Tridoșaja prakaraņa	Explains types of Sannipāta jvara	1-241
5	$ar{A}$ gantuja prakaraṇa	Explains the types, <i>lakṣaṇa</i> ,s <i>Sādhyāsādhyata</i> and <i>arisṭa lakṣaṇa</i> related to <i>Āgantuja jvara</i>	1–37

Table 1 Sections and contents of the MS

2 Historical account

The author of Jvaranirņaya, Sri Nārāyaņa Paņdita is known to be the disciple of Nagesa and the son of Krsna Pandita. He is also identified to be the younger brother of Nāganātha who was one of the teachers of Laksmaņa Pandita who wrote *Nidānapradīpa* (Meulenbeld 2002). Sri Nārāyana Pandita is also the author of Vaidyavallabhatīkā and Siddhantasamcaya which are the commentaries of the texts Siddhāntacikitsā and Śārngadharā's Triśatī respectively (Meulenbeld, 2002, p. 265). The time period of this treatise is corroborated to be sixteenth century CE from the fact that Sri Nārāyaņa Paņdita has written a commentary for Śārngadharā's Triśatī on jvara which was written in fifteenth century CE. The treatise Jvaranirnaya was published for the first time by Kerala Viśvavidyālaya, Anantaśayana Grnthāvalī by Sri. K Raghavan Pillai (Pandita, 1963). The available text is a printed copy of the manuscript published in 1963 completed/published on Pauşa śuddha dvitīya as mentioned on it. Looking into other popular contemporary works of the period, it may be inferred that it was a time when many commentaries for various classical treatises were being written. It was also a time of a major evolution happening in Ayurvvda with a trend to concise and simplify the voluminous texts. Texts like Śārngadharā Samhitā (Shastri, 2013) and Mādhava Nidāna (Tripathi, 2006) were being composed by compiling aspects from various texts. This treatise is one such compendium on jvara which incorporates the aspects from various other texts along with the author's way of thinking.

3 Presentation and core content of the text

The main sources of this text are *Caraka Samhitā*, *Suśruta Samhitā*, *Aṣṭānga Hṛdaya/Sangraha* of Vāgbhaṭa. The opinions of various authors and texts are mentioned in different contexts throughout like Bhālukī (*Bhāluka Tantra*), Ćaraka, Jējjata, Khāranādi, Mādhava, Munī (Vāgbhaṭa), Nāgabhartar, Ŗṣi (Vāgbhaṭa), Sāmpradayikaḥ, Suśruta,



Tāntrikaḥ, Tārkikaḥ, Vāgbhaṭa, Vrddha Suśruta apart from his own opinion. It is an exclusive text on classification of clinical features of different types of fever and contains five sections in total (Table 1).

The most striking feature of this text are the separate chapters devoted for the description of fevers caused due to single *doşa* (*ekadoşaja*), fevers with predominance of two *doşa* (*dvidoşaja*), the *sannipāta* (involving three *doşa*/*tridoşaja*) and fevers due to extrinsic causes (*āgantūja*). The *sannipāta* is described in great detail with 241 verses and is the largest among all the sections. The clinical signs, prognosis and signs of imminent death are also described for certain specific types of fevers in the text.

3.1 Upōdghāta prakaraņa

This is the introductory section of the manuscript which deals with the evaluation of the disease (*roga parīkṣa*) with the help of six evaluating factors (*sat nidāna*) emphasising *upaśaya* (relieving factors), a component of diagnosis looking at how the body responds to an administered diet, medicine or lifestyle which is elaborated in detail.

Key topics dealt: There is a mention of anupaśaya (factors antagonistic to upaśaya), as the sixth cause (nidāna) - "śasto anupaśayam" [4]. The causes for endogenous fevers (*nija jvara*) are explained in different stages like stage of accumulation of doşa (doşa sanćaya), stage of vitiation (prakopa), stage of spread (prasara), stage of localization (sthāna samaśraya), stage of expression of symptoms (vyakti), stage of differentiation (vheda). These six are called the movement of doşa (vātādīnām gati) [5]. It is mentioned that in the stage of *ćaya*, there is dislike towards similar attributes (guna) and liking/affinity towards dissimilar guna [7]. This feature is exhibited in mild $(h\bar{n}a)$ form, in the stage of *prakopa* it is in moderate (madhyama) form and in the stage of *Prasāra* it is in severe (*vrddha*) form. There is a mention that the diseases which manifest without the specified order of events are known as exogenous (*āgantu*) [11]. Upaśaya is explained with the details of medicines (bheşaja), diet (āhāra) and lifestyle modification (vihāra). These are explained with examples of diseases like rhinitis (pratiśyaya) [18], diarrhoea (atisāra) [20], fever due to pitta predominance (pittaja jvara) [22], psychosis (unmāda) [24], fever due to *kapha* predominance (*slēṣma jvara*)[26], burns (*vanhipluşta*) [29], rheumatic type of fever (*ādhyavāta*) [30], fever with predominance of coldness (*śīta jvara*) [31].¹

3.2 Pŕthakjāta prakaraņa

Pŕthakjāta here means "caused by single doşa ($\bar{e}ka \ doşa$) specifically". The cause ($nid\bar{a}na$), prodromal symptoms ($p\bar{u}rvar\bar{u}pa$), symptoms (lakşana) and types that manifests due to the involvement or vitiation of a single doşa, two doşa, three doşa and fever due to extrinsic causes ($\bar{a}gantu$) are mentioned in this section. This section also deals with latent fevers ($vişama \ jvara$) and the time taken for relief from different types of fevers.

Key topics dealt: It is mentioned that the cause for the manifestation of a disease is the faulty usage (*mithyā yoga*), excessive usage (*atiyoga*) of food and/or lifestyle. It could also be due to sinful acts ($p\bar{a}pa \ karma$). Along with this, pathogenesis specific to a disease (*viśeṣa samprāpti*) is also mentioned [10]. General prodromal symptoms ($s\bar{a}m\bar{a}nya \ p\bar{u}rvar\bar{u}pa$) and specific prodromal symptoms (*viśeṣa apūrvarūpa*) on the basis of *doṣa* are mentioned and the opinion of *tārkikaḥ* is also mentioned [21]. Santata, śuddha santata, śhuddha pratyāhika [40] are the three types of *jvara* caused due to *vāta*.

3.3 Dvandvaja prakaraņa

This section is called "dvandva" because it deals with explanations mainly of the combination of two doşa. The section starts with the explanation of prakrti sama samaveta/hetu guṇa/ samavāya and vikrti viṣama samaveta/hetu anānurupa guṇa/ viśeṣa (ayurvedic concepts of understanding the heterogeneity of patterns in a same disease).

Key topics dealt: Dvandva are of two types; samavāya and višeşa like hetu anurūpa and hētu anānurūpa, prakŗti sama samaveta is samavāya and vikŗti vişama samavēta is višeşa. This part is not very clear as to what is exactly indicated, and needs further analysis [1–2]. The author explains the concept of vātapitta, slēşmavāta, vātaslēşma, slēşmapitta, pittaslēşma [7–18] (dvandvaja jvara) with the help of "śringagrāhika nyāya" (a maxim which means to hold the horn of a cow or an ox to point a particular one from the others in a herd). The references of Suśruta [19] and Jējjata [20] are quoted in the context of describing the 'dvandva' section. But interestingly, the author has mentioned their opinion in the main verse itself without giving a verse number. The author gives his opinion at the end in these contexts.

3.4 Tridoșaja prakaraņa

This section deals with types of *sannipāta* which are mostly mentioned by Vāgbhaṭa. Apart from this, it also deals with fevers affecting various *dhātu* (*dhātugata jvara*) and the strength/severity of each of them (*balābala*).

Key topics dealt: The author mentions that this section is similar to the explanations of Vagbhata [16]. Suśruta's opinion is mentioned in the context of prakrti sama samaveta [36]. The concept of vikrti visama samaveta laksana is mentioned to be taken from Vagbhata [41]. Unique terms such as ojovisramsa [55], ojonirodha [57], ekapaksābhighāta [59], sammohana sannipāta [60], karkotaka sannipāta [71], vaidārika sannipāta [78], rauti sannipāta [82], paphaņa sannipāta [90], viddhaphala sannipāta [95], makara sannipāta [98], kotapalaka sannipāta [100] are mentioned and has also referred to Vrddha Suśruta in this context [102]. Names and symptoms of *jvara* which are uncommon such as bhūtah [109], antardahārdhita [113], bhramākhyam [124], sandhigam [125], karnikā [127], kānthakōnja [129], jihvakākrānta [130], taņdrika [132], pralāpaka [133], raktaśtīvi [134], śītagātra [135], abhinyāsa [136], pralepaka [144], vātabalāsaka [145], nāgabhartra [166], āditva [168] are mentioned. Opinions of Vagbhata and Madhava are mentioned in the context of types of sannipātaja jvara [153]. Similes for a type of *jvara* like 'narasimha and ardhanārīśwarā' are mentioned [158]. Deranged movement/ flow of vāta (pavana gati visamva) is mentioned as the cause for visamajvara [161]. Jējjata's opinion on the pattern of fever is mentioned [176]. In the context of *dhātugatatva*, the author mentions that some other authors opine kshīņa dosa to be the cause for dhātugatatva [184]. Dosa affecting particular dhātu like vāta for asti; pitta affecting sveda, śonita, majja, māmsa, rasa, meda; kapha affecting śukra, oja, mūtra and vit is mentioned [200]. Factors influencing the balābala of jvara are mentioned in terms of doşa, anna, ćeśta, deśa, sthāna and karma and few examples are also sighted [202]. Patterns of satata, anyadyuśka jvara as opined by "other authors" are mentioned [214]. It is mentioned that both prākŗta or vaikŗta jvara start from rasa [217]. It is mentioned that 'some' classify the dhātugata jvara on the basis of *linga* which is *soumva* or *tīksna* [227]. Description about *pakśika jvara* is also mentioned [235].

3.5 Āgantuja prakaraņa

This is an exclusive section on extrinsic fevers (*āgantu jvara*) which explains about the types, symptoms (*lakṣaṇa*), prognosis (*sadhyāsādhyata*) and omen (*ariṣṭa lakṣaṇa*) related to it.

Key topics dealt: It is mentioned that in *āgantuja jvara*, *manah tāpa* happens first [14]. It is also mentioned that these fevers are difficult to diagnose and treat for even a *vrddha*



¹ The numbers in the "[]" indicate the corresponding verse number in the manuscript.

vaidya because they are grave (*gambhīra*) and manifests with a feeling of heat inside the body (*antṛdāha*) and excessive thirst (*tṛṣṇa*) [19]. *Ariṣṭa lakṣaṇa* related to *jvara* are also mentioned [26]. At the end, the author mentions his name and year of composition [36].

4 Discussion and conclusion

Looking into the methodology employed *Jvaranirnaya* looks like a compendium on *jvara* written in a simple language and composed in *padya* form. The topics are well classified under specific sections and in certain contexts the author mentions the opinion of other authors and concludes with his own opinion on the same. Simple examples are given to explain the concepts but the author has mainly focussed on the symptomatology rather than the treatment throughout the text.

Being a monograph, it covers all the different classifications on jvara based on dosa and those caused due to extrinsic causes (*āgantu*). Though the treatise does not discuss the treatment aspects, it briefly touches upon certain principles of treatment. It appears that the author emphasises more on the diverse presentations caused due to the permutation and combination of *dosas* and thus has presented the text focusing on it. This could be because there were other contemporary texts available which focussed exclusively on the aspects of medications and treatments and this work would aid in fine tuning it. The verses match to Caraka samhitā, Suśruta samhitā, Astānga Hrdaya/Sangraha in certain contexts of this text but the author has also modified the verses in most of these contexts by additionally adding his own versions to the borrowed ones. There are also verses which are purely contributed by the author himself in the text. However, this is elicited by going through the text in general and noting the observations. A thorough analysis is required to exactly state the original contribution of the author and the content borrowed from other texts.

The explanations of *sannipāta jvara* along with the prognosis are dealt with very elaborately with 241 out of 365 verses devoted to it. This kind of detailing is not seen in any of the main treatises of *Ayurveda*. At around the late medieval time period (between thirteenth and sixteenth century CE), treatises with similar approach are known to have been written focussing on conditions with *sannipāta doṣa*. One such treatise is *Aśvini Samhitā* which has a separate section named *sannipāta kalikā* (Sharma, 1981, p. 337). This gives a clue that around these times, there was an emergence of newer and more complex diseases along with the prevalence of pandemics (Piret & Boivin, 2021) which compelled the authors to focus on such areas. Even the contemporary classics such as *Yoga Ratnākara* (Anonymous, 2005) and *Bhāva Prakāśa* (Dwivedi, 1998) focussed on herbo–mineral preparations which indicate the requirement of such potent medicines to combat *sannipāta* conditions during the period. All points considered, *Jvaranirņaya* is a manuscript which has the potential to be explored in detail and translated. It could yield very important clues on treating subtle and complex *sannipāta* conditions which pose a great challenge to the clinicians.

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References

- Acharya, J. T. (2013). Caraka Samhitā of Caraka-Jvara Cikitsā. Chaukhambha Prakashan.
- Acharya, Y. T. (2007a). Aţşānga Sangraha. Chaukhambha Sanskrit Series.
- Acharya, Y. T. (2007b). Suśruta Samhitā of Suśruta-Jvara Cikitsā. Chaukhambha Orientalia.
- Anonymous. (2005). Yogaratnakara. Chaukhambha Sanskrit Bhawan.
- Dwivedi, V. (1998). Bhāva Prakāśa Nighanţu (9th ed.). Motilal Banarsidas Press.
- Meulenbeld, G. (1999–2002). A history of Indian medical literature. In *Groningen oriental studies* (Vol. IIA). E. Forsten. HIML_II A. Pandita, N. (1963). *Jvaranirnaya*. Kerala University.
- Panja, A. K., Chattopadhyaya, A., & Chaudhuri, S. (2011). A comprehensive outlook of Sannipata. AYU, 32(2), 154–164. https://doi. org/10.4103/0974-8520.92541
- Paradakara, S. S. (2016). Aţşānga Hrdaya of Vāgbhaţa-Jvara Cikitsā. Chaukhambha Sanskrit Samsthana.
- Piret, J., & Boivin, G. (2021). Pandemics throughout history. *Frontiers in Microbiology*, 15(11), 631736. https://doi.org/10.3389/fmicb. 2020.631736
- Prasad, P. V. (2001). Jvara (fever)-A medico historical perspective. Bulletin of the Indian Institute of History of Medicine Hyderabad, 31(2), 103–125.
- Sarma, H. (2019). Kaşyapa Samhitā of Ācarya Kaşyapa. Chaukhambha Sanskrit Sansthan.
- Sharma, P. V. (1981). *Ayurveda Ka Vaijňanika Itihāsa* (2nd ed.). Chaukambha Orientalia.
- Shastri, P. P. (2013). Sharngadhara Samhita of Sharangadhara. Chaukhambha Publications.
- Tripathi, B. (2006). *Mādhava Nidāna of Mādhavkara*. Chaukhambha Sanskrit Sanshtan.