# Memoirs of Vaidyas

The Lives and Practices of Traditional Medical Doctors in Kerala, India (1)\*

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#### Abstract

This article presents an English translation of interview with a doctor of traditional poison- therapy (*viṣavaidya*), V\*\*\* S\*\*\* Nampūtiri (1917~) in Kerala, India. The contents of the interview are 1. Background and present circumstances, 2. Textual traditions, 3. Traditional medicines, 4. Treatments, 5. *Mantra* and reading omens and 6. The canon of *viṣavaidya*.

## Key words

Ayurveda, Traditional Indian Medicine, Toxicology, Venomous Snakes, Kerala

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#### Introduction

A large part of traditional medical knowledge is often embodied in learned and skilled practitioners (Vaidyas) who lead their lives in the traditional ways in India even today. We have taken a survey of these traditional medical practitioners in Kerala and interviewed some of them. We made inquiries mainly about their life histories, educations, training methods, textual traditions and clinical experiences in our interviews. The purpose of our interviews is to reveal the various aspects of living traditions of medicine in India through the interviewees' stories. Our interviews were recorded on videotapes by permission of the interviewees. From the recorded videotapes, we made transcriptions in the original language, Malayalam and translated them into English. We would like to introduce here one of our interviews. The interviewee is a doctor of traditional poison-therapy (visavaidya), V\*\*\* S\*\*\* Nampūtiri (1917~).1 We made an attempt to prepare a literal translation of the interview closely to the original, but in order to promote better understanding of what was said, we organized the stories by topic and gave detailed explanations in the footnotes. The personal names of living persons, and their related personal and place names are shown by initial characters with asterisks to protect their privacy. This interview was conducted as one of the activities of Indo-Japanese research project, PADAM (Program for Archiving and Documenting Ayurvedic Medicine) directed by the authors (Yamashita and Manohar) and supported by JSPS (Japan Society for the Promotion of Science) and Mishima Kaiun Memorial Foundation, Japan. An overview of this interview was published in Japanese, "Indodentoigaku-no-genzai, - Keralashuu-niokeru-chousakiroku (1)- "Kyotogakuen University Review, Faculty of Business Administration. Vol.11, No.3 March 2002, pp.133-152.

### Data of the interview

Date: 26th August 2001 (additional interviews: 21st August 2003; 22nd March 2006)

Place: At the interviewee's residence in Palakkad, Kerala, India

Interviewee: V\*\*\* S\*\*\* Nampūtiri (1917 ~ ), Doctor of traditional poi-

son-therapy (viṣavaidya)

Interviewer: Sasi Keezhattupurath

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<sup>&</sup>lt;sup>1</sup> Nampūtiri (also Namboodiri or Namboothiri) Brahmins are the highest caste in Kerala. For their traditions and community, see Parpola [2000].

Video-record: PADAM VT, G003 and G004. For about 73 minutes in total

Original Language: Malayalam Translator: P. Ram Manohar Editor: Tsutomu Yamashita

#### Editor's note

[ ]: Supplementary explanation by editor( ): Paraphrase of the previous word by editor

#### Abbreviations

• AHS: Astāngahrdayasamhitā

• AS: Aṣṭāṅgasaṅgraha

• Ci: Cikitsāsthāna

Ka: Kalpasthāna

• Mal.: Malayalam

Ni: Nidānasthāna

Śā: Śārīrasthāna

• Skt.: Sanskrit

• SS: Suśrutasaṃhitā

• Sū: Sūtrasthāna

• Utt: Uttarasthāna or Uttaratantra

## Interview with V\*\*\* S\*\*\* Nampūtiri

## 1. Background and Present Circumstances

I was born in K\*\*\* V\*\*\* and am 84 years old now. I was born in the *Malayāļaṃ* year 1093 (1917 according to the Christian calendar) under the star of *Utraṃ* (the 12<sup>th</sup> asterism) during the *Malayāḷaṃ* calendar month of *Kuṃbhaṃ* (February-March). We (our family) used to live as a joint family of eight-ten members, including [my] father, brother, grandfather and so on.

Initially, I studied the *Vedas* for four-five years. I had a keen interest in  $\bar{A}yurveda$ . My grandfather's brother (Mal. muttappan)<sup>2</sup> (A\*\*\* Nampūtiri) was a ''doctor of poison-therapy'' (Skt. viṣavaidya).<sup>3</sup> I stayed

<sup>&</sup>lt;sup>2</sup> In Malayalam, *muttappan* means "younger brother of one's paternal grandfather. This Malayalam word is one of the kinship terms used by only Nampūtiri Brāhmins. Cf. Mencher & Goldberg [1967] pp.91-97.

<sup>&</sup>lt;sup>3</sup> In Sanskrit, *visa* means 'poison'. *Vaidya* in Sanskrit means 'a learned person' especially 'medical doctor' or 'physician' and sometimes denotes 'medicine' itself.

with him for some time. I learned a little English, and then I learned Sanskrit. I learned the *Yajurveda* under N\*\*\* N\*\*\* of A\*\*\* *Mana*. My *guru* in the traditional system of "poison-healing" (Skt. *Viṣavaidya*) was C\*\*\* K\*\*\* Nampūtiri (1879-1966). He had a disciple, P\*\*\* K\*\*\* Nampūtiri, under whom I studied *Viṣavaidya* for about four or five years. Thereafter, I studied *Viṣavaidya* under my *guru* (C\*\*\* K\*\*\* Nampūtiri), until I was 23 years old.

My guru used to come and stay here for a few months every year from the Malayāļaṃ month of Kanni (September-October) onwards. All of his advice and instructions during those visits would be written down and preserved. Subsequently, I started treating patients on my own. This practice has continued until today. I have treated more than four hundred cases of serious snakebites. Not to mention other treatments, I do not perform 'purification treatments' (Skt. śodhanacikitsā). Of course, I do perform 'enema therapy' (Skt. vasti), although I do less of 'emesis therapy' (Skt. vamana) and 'purgation therapy' (Skt. virecana). My treatment is basically of the 'pacification' (Skt. śamana) type.

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*Viṣavaidya* can be rendered as both 'a doctor who specializes in detoxification' or 'a doctor of poison therapy' and his/her traditional 'poison-healing system'. In this transcription, *viṣavaidya* means 'a doctor of poison therapy' and *Viṣavaidya* means 'traditional poison-healing system'.

<sup>&</sup>lt;sup>4</sup> The Malayalam word *mana* literally means 'house', and it refers especially to the traditional houses of Nampūtiri Brāhmins and their patrilineal descent groups.

<sup>&</sup>lt;sup>5</sup> The treatments and medicines of Āyurveda are classified broadly into two categories, namely purification (śodhana) type and pacification (śamana) type. AHS Sū 1.24cd = AS Sū 1.46ab: 'Medicines are briefly of two kinds, purification and pacification.' (śodhanaṃ śamanaṃ ceti samāsād auṣadhaṃ dvidhā). For śodhana type of treatments, the Śārṅgadharasaṃhitā 1.4.8cd-9ab gives an explanation: 'That which an accumulation of impure matter (mala) moves away from its seat in an upward or downward direction, is an agent that purifies the body, for example, devadālīphala.' (sthānād bahir nayed ūrdhvam adho vā malasañcayam// dehasamśodhanaṃ tat syād devadālīphalaṃ tathā/) (translated by G. Jan Meulenbeld) Cf. the Vangasenasaṃhitā (Cikitsāsārasaṅgraha), Dīpanapācanadravyalakṣaṇādhi-kāra 8; the Bhāvaprakāśa 6.220. See Meulenbeld [1974] p.506.

<sup>&</sup>lt;sup>6</sup> For śamana type of treatments, the Śārngadharasaṃhitā 1.4.2cd-3ab runs: 'That which has no purifying action on congruous morbific entities (doṣa) nor rouses them, (but) makes congruous those which are incongruous, is (called) śamana, for example amṛtā.' (na śodhayati na dveṣṭi samān doṣāṃs tathoddhatān // samīkaroti viṣamāñ śamanaṃ tadyathāmṛtā / ) (translated by G. Jan Meulenbeld)

Cf. the *Vangasenasaṃhitā* (*Cikitsāsārasangraha*), *Dīpanapācanadravyalakṣaṇādhi-kāra* 2; the *Bhāvaprakāśa* 6.214. See Meulenbeld [1974] p.511.

I have reduced my practice nowadays, because my daughter has taken it up, and one of my disciples is now very active. I cannot focus my mind because of my old age. Yet currently I still treat a small number of patients.

I am not boasting, but it is a matter of fact that there has not been a single mishap in any of the poisoning cases that I have handled. I am confident to treat snakebites even today, that is, if the patients are brought here in time. Nowadays, the primary problem is with the availability and quality of medicines. About 25 years ago, at home I used to prepare and keep many medicines vital for treating snake-poison. It has been about 50 years now since I settled down here with my family. About eight to nine people used to stay here. We provided them with food and housing, and they used to work day and night to prepare the medicines. Today the situation has changed. There are no people to make medicines. Therefore, sufficient medicines are not available, and it is difficult to attend to patients at night. In spite of all this, I am willing to treat patients if they approach me. But patients have begun to realize that I have some difficulties and that I am old.

Apart from [treating cases of] poisoning, I regularly sit in the 'storage house' (Mal. *pattāyappura*)<sup>7</sup> in the afternoon. Patients come and see me there. Most of them are Nampūtiris, and they come from far off places. My wife passed away 12 years ago. I am now living like an ascetic, staying alone and teaching these children (one of his grandsons and a neighbour). Many people approach me to learn, but I cannot help them all. So I decline their requests. There is no limit to my method of teaching. Yet it is not possible to educate more students. This is a brief account of my life.

The 'treatment of poisoning' (Skt. *viṣacikitsā*) is a tradition in my family, so I have focused on it. I used to come and sit at the facade (Mal. *pūmukhaṃ*)<sup>8</sup> [of my house] at 6 o'clock in the morning and recite the *Aṣṭāṅgaḥṛdayam*. This has been my custom for more than seventy years. And I have been teaching these children (my students) without making any compromises. I don't ask them to come here and study. I sit with

<sup>&</sup>lt;sup>7</sup> *Pattāyappura* is a storage house or granary of rice in the traditional premise of Nampūtiri Brāhmins or other rich families in Kerala. This structure is also used as a resting place for the male visitors. Some families uses it for their important meetings and other activities. Cf. Parpola [2000] p.375.

<sup>&</sup>lt;sup>8</sup> *Pūmukhaṃ* is a portion of the traditional house in Kerala. Cf. Parpola [2000] p.376.

<sup>&</sup>lt;sup>9</sup> Vāgbhaṭa's Aṣṭāngahṛdayasaṃhitā (AHS), one of the classical treatises of Āyurveda in Sanskrit.

them as they learn and teach in the process; this way they hear the pronunciation very clearly. Including my daughter, six-seven people have learnt the traditional system of 'poison-healing' (*Visavaidya*)<sup>10</sup> from me.

#### 2. Textual Traditions

The method of studying Viṣavaidya has three parts: First, there is the study of Sanskrit, followed by a close study of the  $Aṣt\bar{a}ngahrdayam$ , and it ends with learning the  $Jyotsnik\bar{a}$ . In Kerala, the  $Aṣt\bar{a}ngahrdayam$  is the basis of  $\bar{A}yurveda$ . After that, if the student is interested in a particular branch, then that is taught – e.g., the  $Jyotsnik\bar{a}$  in the case of Viṣavaidya. After studying the  $Jyotsnik\bar{a}$ , one needs only to review the Prayogasamuccayam, 12 just like one would study the  $Aṣt\bar{a}ngasangraha$  after studying the  $Aṣt\bar{a}ngahrdayam$ .

We follow those books in our method of treatment – i.e., the *Aṣṭāṅgahṛdayam* for *Āyurveda*, the *Jyotsnikā* for *Viṣavaidya* followed by the *Prayogasamuccayam*. This is the tradition of Kerala. My own *guru* has composed a work called the *Viṣavaidyasārasamuccayam*. <sup>14</sup> It briefly deals with the subject of *Viṣavaidya* in about three hundred verses. The *Prayogasamuccayam* lists many medicines and methods of treatment. The *Viṣacandrikā*, <sup>15</sup> a book of about five hundred verses, contains many interesting and important applications.

<sup>&</sup>lt;sup>10</sup> Āyurveda has the eight clinical branches (aṣṭānga). Healing of poisoning (Viṣaci-kitsā) or toxicology (Agadatantra) is one of the eight clinical branches. This branch has been developed especially in Kerala by native physicians in order to meet the needs of patients of poisonings. In Kerala, this branch is generally known as Visavaidya.

Nārāyaṇa's Jyotsnikā is considered to be the oldest extant text of the traditional system of poison-healing (Viṣavaidya) in Kerala; it is written in old Malayalam (manipravālam). See Bibliography, Malayalam Texts.

<sup>&</sup>lt;sup>12</sup> The *Prayogacamuccaya* is the text of traditional poison-healing system in Kerala written in Malayalam by Koccuṇṇi Tampurān (1870-1936/37), one of the Cochin royal family members. There are some printed editions of this text, see Bibliography, Malayalam Texts.

<sup>&</sup>lt;sup>13</sup> Vāgbhaṭa's Aṣṭāṅgasaṅgraha (AS) is one of the classical Sanskrit treatises of Āyurveda

<sup>&</sup>lt;sup>14</sup> The *Viṣavaidyasārasamuccaya* was published in 1961. An English rendering of this text was published in 2006. See Bibliography, Sanskrit Texts.

<sup>&</sup>lt;sup>15</sup> The *Visacandrikā* is one of the Malayalam texts of *Visavaidya*.

However, all of these texts cannot be put into practice today due to unfavorable circumstances. The *Bhaiṣajyaratnāvalī*<sup>16</sup> [also] has very important recipes, but the study of these books becomes relevant only if one has first studied the *Aṣṭāṅgahṛdayam*. As the text says: *etatpaṭhan saṅgrahabodhaśaktah* .....<sup>17</sup>

The books and medical implements, such as a wooden cot (Mal. *dhārāpātti*), <sup>18</sup> have been gifted away to my daughter's place. Since my daughter is also practicing now, my books and notes are with her. Some traditional books were lost.

It is not enough to simply read and study these works. What is imperative is that these works be brought into the realm of experience. 'Theoretical knowledge' (Skt. śāstrajñāna) must be brought into the realm of 'practical experience' (Skt. karmaparicaya).

#### 3. Traditional Medicines

*Mrtyuñjayam*, *Garuḍāñjanam* and *Mrtasañjīvanī* are important medicines used in the treatment of poison (*viṣacikitsā*) cases. My *guru* instructed me how to purify substances in order to prepare these medicines.

Many mineral ingredients are used in the preparations of [traditional medicines, such as], *Mṛtasañjīvanī*, *Mṛtyuñjaya*, *Jīvarakṣa* and *Garuḍā-ñjanam*, and so on. <sup>19</sup> Mineral ingredients, [such as], mercury, sulphur and arsenic are used in various drug preparations. Some ingredients have to be immersed in the latex of *arka* (*Calotropis gigantea* (Linn.) R.Br.), *snuhī* (*Euphorbia ligularia* Roxb.) for 14 days and then ground into a

<sup>&</sup>lt;sup>16</sup> The *Bhaiṣajyaratnāvalī* is one of the Sanskrit treatises of *Āyurveda*. This work was written by a Bengali physician, Govindadāsa around 18th century A.D..

<sup>&</sup>lt;sup>17</sup> The interviewee quoted from the Sanskrit text of AHS Utt 40.83 here: *etatpaṭhan sangrahabodhaśaktaḥ* ... 'The physician who studies this (text, the *Aṣṭāngaḥṛdaya-samhitā*) will be able to understand (also) the *Sangraha* (the *Astāngasangraha*)'...

Dhārāpātti is a wooden cot made of kupīlu (Skt.) tree (Glycosmis arborea (Roxb.) DC.) for dhārā treatment. Mooss [1983] p.37: 'Dhārā is the process in which medicated oil, milk or butter-milk is poured in a continuous stream on the head, especially on the forehead in a specific manner.'

<sup>&</sup>lt;sup>19</sup> Mrtasañjīvanī, Mrtyuñjaya, Jīvarakṣa and Garudāñjanam are the traditional drug preparations applied in the treatments of Viṣavaidya. For Mrtasañjīvanī, see the Prayogasamuccaya, 5.2 Kālavañcanam (1999 ed., p.133); the Kryākaumudi, 1 Viṣasāmānyaprakaraṇam 134-174; 8 Uragaviṣasāmānyacikitsāprakaraṇam110-115, 335-340, 424-431, 937-943, for Mrtyuñjaya, see the Prayogasamuccaya, 5.3 Sarppaviṣacikitsa (1999 ed., pp.164-165); the Kryākaumudi 8.923-936, 1625-1634, for Jīvarakṣa, the Prayogasamuccaya, 5.2 (1999 ed., pp.134-135); the Kryākaumudi 8.503-555, for Garudāñjana, see the Kryākaumudi 8.1561-1624.

paste in the same medium. Such medicines give quick results and are very potent.

Mercury is only mildly purified before it is administrated in cases of snake poison. One coin weight of mercury is purified by grinding in betel (Skt.  $t\bar{a}mb\bar{u}la$ ;  $Piper\ betle\ Linn.$ ) leaf juice. Sulphur (Skt. gandhaka), <sup>20</sup> realgar (Skt.  $manahśil\bar{a}$ ), <sup>21</sup> orpiment (Skt.  $harit\bar{a}la$ )<sup>22</sup> and so forth are also mineral substances that may be used.  $P\bar{a}s\bar{a}na$  (Skt., Mal.)<sup>23</sup> is not used. It ( $p\bar{a}s\bar{a}na$ ) is dangerous and risky. These medicines should be administered with a clear understanding of the intensity of the poison. If one gives very strong medicines in a case of mild poisoning, the consequences will be injurious.

Immovable poison (Skt. *sthāvaraviṣa*) is used to treat animalistic poison (Skt. *jaṅgamaviṣa*) for treatment and vice versa. The impelling forces (Skt. *vega*) [of immovable and animalistic poisons] are oppositional. One is ascending (Skt. *ūrdhvaga*) and the other is descending (Skt. *adhoga*). So says Caraka. <sup>24</sup> Snake venom is the most important animalistic poison. The opposite immovable poison given in cases of snakebite poisoning is *rasa* (Skt.), or mercury. The root of aconite (Skt. *vatsanābha*; *Aconitum ferox* Wall.) is also used.

#### 4. Treatments

The primary objective [of *Viṣavaidya*, or *Agadatantra*] is to save life. After that, we treat disease. This is the meaning of the term *agada* (Skt.), or poison. *Agada* is that which stops what is going away. *Agada* prevents the vital spirit (Skt. *prāṇa*) from going out of the body. *Agada* prevents the vital spirit located in the throat (Skt. *kaṇṭhagataprāṇa*)<sup>25</sup> from leaving

<sup>&</sup>lt;sup>20</sup> Dutt [1922] pp.26-27.

<sup>&</sup>lt;sup>21</sup> Ibid., pp.44-46.

<sup>&</sup>lt;sup>22</sup> Ibid., pp.41-44.

<sup>&</sup>lt;sup>23</sup> Pāṣāṇa means only 'a stone' in Sanskrit, but in Malayalam and Tamil, pāṣāṇaṃ means not only 'stone', but also 'poisonous mineral', for example, arsenic. Cf. Gundert [1872] p.654.

<sup>&</sup>lt;sup>24</sup> CS Ci 23.17: 'The animal (poison) is situated in the upper part (of the human body), but the plant (poison) is situated in the lower part (of the human body). Therefore, the animal poison harms the plant (poison) and plant (poison) harms the animal (poison).' (jaṅgamaṃ syād adhobhāgam ūrdhvabhāgaṃ tu mūlajam/ tasmād daṃṣṭrā-viṣaṃ maulaṃ hanti maulaṃ ca daṃṣṭrajam//).

<sup>&</sup>lt;sup>25</sup> AHS Utt 36.37cd-38ab = AS Utt 41.86: 'The physician should treat all the others (than those described above) quickly mitigating the poison and protecting the life lurking in the throat, just like saving a house which has caught fire.' (ato 'nyathā tu tvarayā pradīptāgāravad bhiṣak/ rakṣan kanṭhagatān prāṇān viṣam āśu śamaṃ nayet//) (translated by K.R. Srikantha Murthy).

the body. One must know how to handle emergency situations. One must know what to do without delay. When the patient is unconscious, for instance, one must know to use nasal drops (Skt. *nasya*). We have to administer strong medicines, stronger than the intensity of poison. After that, other treatments can be given. Experience is fundamental here.

Poison is dry (Skt.  $r\bar{u}k\bar{s}a$ ), hot (Skt.  $u\bar{s}na$ ) and sharp (Skt.  $t\bar{t}k\bar{s}na$ ) [in quality]. Thus, it is similar to  $v\bar{a}yu$  and pitta. But one has to keep awake during night if afflicted by poison. This (awaking during night) normally aggravates  $v\bar{a}yu$ , but this is not the case with poisoning. The logic of opposites will not work here. One needs to understand things through experience. One needs immense courage to specialize in  $Vi\bar{s}avaidya$ .

Treatment of poisoning ( $Viṣacikits\bar{a}$ ) is done according to the degree to which the doṣas are aggravated (Skt. doṣakopa) and not according to the type of snake [that has bitten the patient]. In western science, snake-poison is cured on the basis of the type of venom that a snake delivers, and a specific anti-venom is administered accordingly.  $\bar{A}yurveda$  is based on the condition of the doṣa. Here, the emphasis is not on the type of snake, but on the nature of the doṣa which is aggravated [by the poison of the snake]. This is an epistemological difference that either stresses the substance (Skt. vastunistha) or the human being (Skt.  $\bar{a}tmanistha$ ).

There are some special remedies: nasal drops (Skt. nasya), eye ointment (Skt.  $a\tilde{n}jana$ ) and so on. They are all special types of treatment for snake poison.

## Nasya

The juice of a particular leaf given as nasal drops (*nasya*) gives instant relief [to the patient]. It can be followed by a routine method of treatment.

<sup>&</sup>lt;sup>26</sup> Dutt [1922] p.17: 'Nasya or the application of medical substances to the nose, forms a prominent feature of native therapeutics.'

AS Utt 40.12: 'Both kinds of poisons (animal and plant poisons) possess properties such as tīkṣṇa (penetration deep), uṣṇa (hot, heat producing), rūkṣa (dry, causing dryness), viśada (viscid, non-unctuous, removing unctuousness), sūkṣma (thin, entering into minute pores), vyavāyin (spreads all over the body quickly and then undergoes processing), āśukārin (quick acting), vikāsin (causes loosening of the joints and tissues), laghu (light in weight), avyaktarasatva (imperceptible in taste), with these ten properties, it remains apākin (indigestible, not undergoing digestion).' (dvividham api caitad viṣam tīkṣṇoṣṇarūkṣaviśadasūkṣmavyavāyyāśukārivikāśilaghvavyaktarasatvair daśabhir guṇair yuktam apāki ca) (translated by K.R. Srikantha Murthy). Cf. CS Ci 23.24-27; SS Ka 2.18cd-23; AHS Utt 35.7cd-8ab.

#### Ūttu

The blowing of medicines into the patient's ears and head region, or  $\bar{u}ttu$  (Mal.) is not related to *mantra*. It is a part of the medical therapy<sup>28</sup> and is routinely done in snake-bite cases. [In  $\bar{u}ttu$  therapy] three practitioners who have kept the medicines in their mouth blow the medicines into the ears and the parietal region (top and lateral walls of the skull) of the patient. If you ask how it works, I cannot explain it. My experience practising  $\bar{u}ttu$  has led me to believe in it.

## Karuprayōga

The application of mercury on an artificially made wound on a patient's scalp is one of the special treatments in the  $karupray\bar{o}ga$  (Mal.)<sup>29</sup> in snake-poison cases. I have done this only in one case. Mildly purified mercury was used in that case. The patient became conscious and was cured. This treatment is not the same one as mentioned in the  $Su\acute{s}-ruta[samhit\bar{a}]$ .<sup>30</sup>

#### A case of cobra bite

When I was once about to leave for Palakkad, a cobra (Skt. darvīkara; Mal. mūrkhan) bit a 20 year old girl harvesting the field behind of my home. She complained of thirst, but fell unconscious before she could be given any water. I was watching these events, deliberating about what should be done. In the meantime, the patient was brought to me in a gunny bag. In such cases, the first thing one has to do is bring back the patient's consciousness. I performed a nasal drop of sharp quality (Skt. tīkṣṇa-nasya) with pepper and holy basil. She became conscious and restless and then she became unconscious again. The tīkṣṇa-nasya was done again with another medical preparation. She regained consciousness. Certain medicines were applied on her forehead to maintain her conscious state. Thereafter, the treatment was started. Within two hours, the girl got up on her feet and walked away.

<sup>&</sup>lt;sup>28</sup> The *Jyotsnikā*, *Cikitsārambham* 19-20 (1124 (1948) ed., p.18).

<sup>&</sup>lt;sup>29</sup> Karu (Mal.) means 'a specialized apparatus' to introduce the potent drugs into the patient's body. *Prayoga* (Skt., Mal.) means 'usage' or 'treatment'. Cf. The *Prayoga-samucca*, 1998 ed., pp. 31-32, pp.91-99. The *Kṛyākaumudi*, 8 (*Uragaviṣasāmānya-cikitsāprakaraṇaṃ*) 858-900.

<sup>&</sup>lt;sup>30</sup> A similar treatment is described in SS Ka 2.43; AHS Utt 35.20 and AS Utt 40.172.

## A case of krait<sup>31</sup> bite

This happened when I was a student [and I heard this from my guru]. After taking an oil bath, a snake bit a person as he was coming out of the pond. He suspected it was a water snake and did not take it seriously. When the victim sat for supper, he found that he could not swallow, and, not only that, mucus was coming out of his mouth. The routine medicines for the management of kapha were given, but to no avail. Kapha, or mucus kept coming out of the person's body. It was unimaginable that so much mucus could be lodged in one person's body. Then my guru came on the scene. He diagnosed the condition as krait poison and gave an appropriate counteractive treatment (Skt. viṣahara) for krait (Skt. rājimañta; Mal. śankhuvarayan or veḷḷikkeṭṭan) poisoning and the patient recovered.

## Viper

Special treatment is required for special types of snake venom. For the cases of viper (Skt. *maṇḍalin*; Mal. *aṇali*) poisoning, a special treatment, *jaladhāra* (Skt.),<sup>32</sup> or 'water-pouring treatment,' is given.

After a poison has been treated, medicines are given to pacify the *doṣas*. This may sometimes require only a week, a month, or even more time. Throughout all of this, diet restriction is very important. At first, proper treatment must be done against  $\bar{a}ma$  (Skt.), or a substance in an unripe condition.<sup>33</sup> Diet itself is treatment. Proper treatment counteracts the cause (Skt. *hetu-viparīta*), not just the disease (Skt. *vyādhi-viparīta*). And what is the cause (*hetu*) here (in the cases of poisoning)? This is  $\bar{a}ma$ , or

<sup>&</sup>lt;sup>31</sup> Krait, the common krait, or Indian krait is a highly venomous snake of the Bungarus genus (*Bungarus caeruleus* (Schneider)) found in the jungles or the shrubs of the Indian Subcontinent.

<sup>&</sup>lt;sup>32</sup> The *Jyotsnikā*, *Cikitsākramādikāraṃ* 62-64 (1124 (1948) ed., p.39); The *Kṛyākau-mudi*, 8 *Uragaviṣasāmānyacikitsāprakaraṇaṃ* 1674-1691.

<sup>&</sup>lt;sup>33</sup> AHS Sū 13.25-26: AHS Sū 8.13cd-14: 'Persons who indulge in partaking incompatible foods, overeating and eating of uncooked food develop the dreaded āmadoṣa which is similar to poison and so known as āmaviṣa (food poison) which also should be refused treatment because of its similarity with poison, quickness of action (causing death) and requiring treatments of opposite nature (to one another).' (viruddhādhyaśanājīrṇaśīlino viṣalakṣaṇam// āmadoṣaṃ mahāghoraṃ varjayed viṣasañjñakam/ viṣarūpāśukāritvād viruddhopakramatvataḥ//) (translated by K.R. Srikantha Murthy). Cf. AHS Sū 13.25-26; AS Sū 11.7. Aruṇadatta comments on AHS Ni 1.1: 'The meaning of āmaya ('disease') (comes from the concept that) all diseases are certainly caused by āma. (āmaya ity asyārtham, kilāma-samutthāḥ sarve vyādha-yaḥ).

the substance in an unripe condition. After  $\bar{a}ma$  is removed, we tackle the disease  $(vy\bar{a}dhi)$ .<sup>34</sup>

Treatment counteracting the cause (*hetu-viparīta*) can be done only when the patient has the patience and all of his or her facilities are available. Today, we mostly perform treatments intended specifically to counteract to the disease (*vyādhi-viparīta*). I would recommend – try to perform the treatment which counteracts to the cause (*hetu-viparīta*) wherever it is possible.

#### Diet restrictions in snake-bite cases

At first, a patient was treated and responded well. Then they went to a hotel (restaurant) and had pungent and sour food. The patient collapsed and could not be saved.

#### Another case

A patient was advised not to use alcohol for two weeks. Not heeding this advice, the person consumed liquor on a festival day. He immediately fell unconscious.

### Dūsīvisa

If poison (visa) is not properly treated, it becomes corrupting poison (Skt.  $d\bar{u}s\bar{v}visa$ ). This is a condition in which the poison remains latent in the body and causes problems later on. In such conditions, one has to perform a 'purification treatment' ( $sodhanacikits\bar{a}$ ). A 'purification treatment' is the fundamental treatment in  $\bar{A}yurveda$ . Only through this can the latent dosa be removed. Otherwise, it will surface again, just like a plant from a seed.

In such cases, one must treat the poison, even though the involvement of the poison may not be obvious. For example, one time a person was bitten by a snake. Treatment was done. Now, if the patient did not follow

<sup>&</sup>lt;sup>34</sup> Cf. AHS Sū 8.23; AS Sū 12.5.

<sup>35</sup> SS Ka 2.25cd-26 = AHS Utt 35.33-34ab = AS Utt 40.40-41: '(Any) poison which has become old, killed (or made ineffective) by other anti-poisonous medicines, dried (or acted upon) by forest fire, breeze and sunlight or that which by its very nature is not endowed well with (all) the properties (of the poison) derives the name dūṣīviṣa. Though of its mild potency, it is not to be neglected, since it continuous to exist in the body for many years getting enveloped by kapha.' (jīrnam viṣaghnauṣa-dhibhir hatam vā dāvāgnivātātapaśoṣitam vā/| svabhāvato vā guṇaviprahīnam viṣam hi dūṣīviṣatām upaiti/ vīryālpamāvān na nipātayet tat kaphāvṛtam varṣagaṇānu-bandhi/|) (translated by K.R. Srikantha Murthy in AHS).

<sup>&</sup>lt;sup>36</sup> See Footnotes 5 and 6.

the prescribed dietary restrictions, the patient's condition would have become serious by the corrupting poison  $(d\bar{u}s\bar{v}isa)$ . The patient could have become afflicted by diarrhoea (Skt.  $atis\bar{a}ra$ ) and died.

There was a debate whether such a patient died of poison or diarrhoea, as this would determine the manner in which the final funerary rites would be performed. Once, Tampurān,<sup>37</sup> who was a famous doctor of poison therapy (*viṣavaidya*), examined such a patient and explained that the patient had died of corrupting poison (*dūṣīviṣa*), not of diarrhoea. In such cases, one cannot merely treat diarrhoea. One must treat the poison as well. *Āyurveda* views all phenomena as interconnected. Even treatment of poisoning (*Viṣacikitsā*) is not fully divorced from internal medicine (Skt. *Kāyacikitsā*) in *Āyurveda*. In Kerala, everything, even treatment of poisoning (*Viṣacikitsā*), is based on the *Aṣṭāngahṛdayam*. Without studying the *Aṣṭāngahṛdayam*, one cannot study poison therapy.

#### Rabies

There was a method of managing rabies (Skt.  $\bar{a}larka$ ). Have you heard? Have you seen? My guru used to treat rabies. He would ask me to write down the histories of all of these cases. One of the most important medicines for treating rabies is dhattūra (Skt.) (Mal. ummattŭ; Datura metel Linn.). The juice of the dhattūra plant is used. This treatment is akin to 'emesis therapy' (vamana). And you know that 'emesis therapy' is difficult to perform, mainly because  $v\bar{a}yu$  moves in contradiction to the natural course (Skt. pratilomagati) here. I have performed 'emesis therapy' a few times.

## 5. Mantra and Reading Omens

I have a lot of experiences to narrate about the field of poison-healing (Vi;avaidya). There are things which ought to be known about the information on messengers from patients and so on (Skt.  $d\bar{u}t\bar{a}divij\tilde{n}\bar{a}n\bar{i}ya$ )<sup>38</sup> in the field of poison-healing.

<sup>&</sup>lt;sup>37</sup> In Malayalam, *tampurān* generally means 'a lord', 'king' or 'male in a royal family', but here, the interviewee described Koccuṇṇi Tampurān (1870-1936/37) as one of the Cochin royal family members and the author of a *Viṣavaidya* text, the *Prayoga-samuccaya*.

<sup>&</sup>lt;sup>38</sup> The practical techniques to draw diagnostic deductions from appearances and attitudes of messengers from patients or various omens on that occasion are illustrated in the chapters named *dūtādivijñānīya* (about information on messengers from patients and so on) in some Āyurvedic texts; for example, AHS Śā 6; AS Śā 12.

About [diagnosis from] features of messengers from patients (Skt.  $d\bar{u}talak sana$ ), I shall share one experience. It was about 7 o'clock in the evening. A patient bitten by a snake was brought to me. I was taking an oil bath at the time. Some people came and informed me [about the patient]. Looking at the time, I knew that the patient wouldn't survive. Indeed, it was true. When I came, the patient was already dead.<sup>39</sup>

I have had many experiences [similar to that one]. One afternoon, I was sitting and talking to some people. A patient bitten by a snake was brought to me in a car. The car was parked outside and one person came to me to convey a message. Just as he walked towards me, a buffalo broke its rope and ran in between him and me. I immediately realized that the patient was dead. And that was what had happened. The patient in the car had already died. 40

Thus, in my experience the [diagnosis from] the features of a patient's messenger (dūtalakṣaṇa) are correct. But this does not mean that I have always looked at such signs. In a snake bite case, one is more concerned about what should be done immediately. The normal custom is to give strong medicines, more potent than the poison that has entered the patient's system. After this, first aid measures are taken, enquiries are then made, and the patient's condition is understood on the basis of dosas. After all of that, treatment is started.

There are effects of *mantras*, too, in addition to medicines.<sup>41</sup> When one properly applies *mantra*, it produces results. However, I do not apply

<sup>&</sup>lt;sup>39</sup> AHS Śā 6.5cd-7: 'The messenger who comes when the physician is thinking or speaking inauspicious, when he is naked, tearing or cutting things, lighting the fire, offering oblations to the manes, sleeping, untied his hairs, taking oil bath, weeping and unclean; such a man is the messenger of a person who is going to die.' (aśastacintāvacane nagne chindati bhindati/| juhvāne pāvakam piṇḍān pitṛbhyo nirvapaty api/ supte muktakace 'bhyakte rudatyaprayate tathā// vaidye dūtā manuṣyāṇām āgacchanti mumūrṣatām/) (translated by K.R. Srikhantha Murthy). Cf. AS Śā 12.4.

<sup>&</sup>lt;sup>40</sup> In ancient India, the buffalo (*mahiṣa*) was generally regarded as an inauspicious animal or a vehicle of *Yama* (Death). The *Bṛhatsaṃhitā*, *Pratimālakṣaṇādhyāya* 57: '*Yama* (Death) has a club and takes a buffalo ride ....' (*daṇḍī yamo mahiṣago* ...).

<sup>&</sup>lt;sup>41</sup> For *mantras* applied in treatments of poisoning, see CS Ci 23.35-37, 61, 90-94, 223; SS Sū 46.448; SS Ka 5.8-13, 51, 7.59-62; AHS Utt 35.24-32, 36.42-43, 89-90, 38.38cd; AS Utt 40.13, 59-67, 156-159, 41.72-75, 42.5-7, 99-106, 46.79-81, 47.59-64, 48.1-2; for example, AS Utt 40.156 runs: 'Poison is full of *tejas* (potency, fire like activity). It does not get warded off (destroyed, prevented from acting) by the administration of drugs as quickly as by the use of *mantras* (sacred/remedial hymns), full of (fortified by) *satya* (truthfulness), *brahmacarya* (righteous conduct) and *tapas* (penance) of the priest/toxicologist.' (*viṣaṃ tejomayaṃ mantraiḥ satyabrahmatapo*-

mantras, because it can lead to grave consequences if the mantra is done improperly. Conversely, medicines are safe. My guru told me always to use only medicines. Nevertheless, my guru himself used to apply mantras.

Though I have been initiated in the *mantra* therapy, I do not use *mantras*. I use only medicines. My *guru* has applied *mantras* to cure cases of snake-poison, but he advised me not to do it because I am a householder. It will affect my family. Only those who have perfect control over their minds and are ascetics (Skt. *tapasvin*) can do it. The concept of *garuḍa* formed in the mind (Skt. *garuḍasaṃkalpa*) works behind the *mantras*. I have had some experiences too. *Mantra* has an advantage in that there is no need for physical substances. On the other hand, medicine has an advantage in so far as it is safe. There are effects of *karman* (Skt.), if the *mantras* are improperly done.

It is said in the texts that *devas* (Skt.) (gods) or *gandharvas* (Skt.) are not the cause for mental ailments, [namely] *naiva devāḥ na gandharvāḥ* ... . <sup>42</sup> The person himself is the cause. If one is strong in the mind, then she or he is not affected.

Daiva (Skt.) means actions performed in the past lives. Here daiva-vyapāśraya treatment is done as a counter measure. Treatment becomes complete only when daiva-vyapāśraya, yukti-vyapāśraya and sattvāva-jaya are done together.<sup>43</sup>

mayaih/ yathā nivāryate śīghram prayuktair na tathauṣadhaiḥ//) (translated by K.R. Srikhantha Murthy).

<sup>&</sup>lt;sup>42</sup> CS Ni 7.19-20: 'Neither the gods, nor gandharvas, nor piśācas, nor rākṣasas nor others inflict on a person who is himself unaffected (by his own deeds).' (naiva devā na gandharvā na piśācā na rākṣasāḥ/ na cānye svayam akliṣṭam upakliśnanti mānavam//) (translated by P. V. Sharma).

<sup>&</sup>lt;sup>43</sup> CS Sū 11.54: 'There are three types of therapy – spiritual (daivavyapāśraya), rational (yuktivyapāśraya) and psychological (sattvāvajaya). The spiritual therapy consists of recitation of mantras, wearing roots and gems, auspicious acts, offerings, gifts, oblations, following religious precepts, atonement, fasting, invoking blessings, falling on (the feet of) the gods, pilgrimage, etc. The rational therapy consists of rational administration of diet and drugs. Psychological therapy is restraint of mind from the unwholesome objects.' (trividham auṣadham iti, daivavyapāśrayam, yuktivyapāśrayam, sattvāvajayaś cal tatra daivavyapāśrayam, mantrauṣadhimanimangalabalyupahārahomaniyamaprāyaścittopavāsasvastyayanapranipātagamanādi, yuktivyapāśrayam, punar āhārauṣadhadravyānām yojanā, sattvāvajayaḥ, punar ahitebhyo 'rthebhyo manonigrahaḥ) (translated by P.V. Sharma). However, the interviewee's interpretation of the three types of the Āyurvedic therapy seems to be different from P.V. Sharma's the above translation.

Even the thoughts of physicians, social circumstances, and other things are influenced by *daiva*, or past actions. So *daiva-vyapāśraya* treatment creates the occasion for proper performance of *yukti-vyapāśraya* treatment. Mēlppattūr (Nārāyaṇa) Bhaṭṭatiri<sup>44</sup> was cured of a *vāta* disorder by the power of devotion. *Sattvāvajaya* is also important, because all diseases originate from the mind, [namely] *rāgādirogān...*<sup>45</sup>

## 6. The Canon of vişavaidya

The traditional doctor of poison therapy (*viṣavaidya*) should not accept any remuneration. Kōkkara (Nampūtiri)<sup>46</sup> in Tripunithura [Ernakulam district] represents an important tradition of the poison-healing system (*Viṣavaidya*). A person wanted to learn *Viṣavaidya* in order to earn a living and approached Kōkkara (a famous *viṣavaidya* at the time). Kōkkara asked him to touch the book and swear that he will not charge his patients for treatment. The man was taken aback [and felt disappointed to know that he could not get any money from patients]. Kōkkara, [who was a member of an affluent Nampūtiri family at that time], was assured that he will not have any financial difficulties, even if he does not charge his patients. This holds good for not only snake-poison, but also all kinds of poison.

One should not visit the patient's home to treat cases of poisoning. This is because the required facilities will not be present there. Cases of snake-bites especially demand immediate action. So the patient should be brought to the home of the doctor who treats cases of poisoning.

Now all these practices are dying out. When traditions are dying out, we cannot expect the traditional treatment of poisoning  $(Visacikits\bar{a})$  to escape the onslaught. Now, social changes have occurred, which are unfavourable for these traditions to survive.

<sup>&</sup>lt;sup>44</sup> Mēlppattūr Nārāyaṇa Bhaṭṭatiri is a famous Sanskrit poet around the 16th century and the author of the *Nārāyaṇīyaṃ*, a poetry work extolling the glory of the Lord of Guruvayur.

<sup>&</sup>lt;sup>45</sup> The interviewee quotes from the beginning verse of AHS here. AHS Sū 1.1: 'Obeisances be, to that *apūrva vaidya* (the unparalleled physician), (all) the diseases like *rāga* (passion) etc., which are constantly associated (innate) with and spread all over the body, giving rise to *autsukya* (anxiety), *moha* (delusion) and *arati* (restlessness).' (*rāgādirogān satatānuṣaktān aśeṣakāyaprasṛtān aśeṣān/ autsukyamohāratidāñja-ghāna yo 'pūrvavaidyāya namo 'stu tasmai//)* (translated by K.R. Srikantha Murthy).

<sup>&</sup>lt;sup>46</sup> Kökkara Nampūtiri is almost a legendary visavaidya who lived around the mid-19th century in Kerala.

## **Bibliography**

#### Sanskrit Texts

- AHS: Aṣṭāngahṛdayam (The core of octopartite Āyurveda), composed by Vāgbhaṭa with the Commentaries Sarvāngasundarā of Aruṇadatta and Āyurvedarasāyana of Hemādri, collated by Aṇṇā Moreśwara Kuṇṭe and Kṛṣṇa Rāmchandra Śāstrī Navare, ed., by Bhiṣagāchārya Hariśāstrī Parāḍakara Vaidya, Jaikrishnadas Ayurveda Series No.52. Varanasi, Delhi, 1982.
  - English Translation: *Vāgbhaṭa's Aṣṭāñga Hṛdayam* (Text, English translation, Notes, Appendix and Indices) Vol. I, II, III. Translated by K.R.Srikantha Murthy. Krishnadas Ayurveda Series 27. Varanasi: Krishnadas Academy, 1991, 1992, 1995.
- AS: Vrddhavāgbhaṭa, Aṣṭāṅgasaṅgrahaḥ Induvyākhyāsahitaḥ. Anaṃta Dāmodara Āṭhavale ed. Pune, 1980.
  - English Translation: *Aṣṭāñga Samgraha of Vāgbhaṭa* (Text, English Translation, Notes, Indeces etc.) Vol. I, II, III. Translated by K. R. Srikantha Murthy. Jaikrishnadas Ayurveda Series 79. Varanasi: Chaukhambha Orientalia, 1995, 1996, 1997.
- Bhāvaprakāśa: *Bhāvaprakāśa of Bhāvamiśra* (Text, English Translation, Notes, Appendeces and Index), Translated by K. R. Srikantha Murthy. Vol. 1, 2. Krishnadas Ayurveda Series 45. Varanasi: Krishnadas Academy, 1998, 2000.
- Bṛhatsaṃhitā: M. Ramakrishna Bhat, *Varāhamihira's Bṛhat Saṃhitā* with English Translation, Exhaustive Notes and Literary Comments. Part One, Two. Delhi, Varanasi, Patna, Madras: Motilal Banarsidass, 1981, 1982.
- CS: The Charakasamhitā of Agniveśa revised by Charaka and Dridhabala. ed. by Vaidya Jādavaji Trikamji Āchārya. Bombay, 1941. 4th ed., New Dehli, 1981. English Translation: Caraka-Samhitā, Agniveśa's treatise refined and annotated by Caraka and redacted by Drdhabala (Text with English Translation). Vol. I, II, III, IV. Editor-Translator, Priyavrat Sharma. Jaikrishnadas Ayurveda Series 36. Varanasi, Delhi: Chaukhambha Orientalia, 1981, 1983, 1985, 1994.
- Śārngadharasamhitā: *The Śārngadhara-Samhitā by Paṇḍita Śārngadharāchārya*, *Son of Pandita Damodara* with the Commentaries, Adhamalla's 'Dipika' and Kashirama's 'Gudhartha-Dipika', edited with Foot-notes by Parashuram Shastri Vidyasagar, Foreword Guruprasad Sharma. Krishnadas Ayurveda Series 14. Varanasi: Krishnadas Academy, Reprint ed. 1986.
- SS: Suśrutasamhitā of Suśruta. ed. by Vaidya Jādavji Trikamji Āchārya and Nārāyan Rām Āchārya. Bombay, 1938. 5th ed., Varanasi, Delhi, 1992. English Translation: Suśruta-Samhitā with English translation of text and Dalhana's commentary alongwith critical notes. Edited and translated by Priya Vrat Sharma. Vol. I, II, III. Haridas Ayurveda Series 9. Varanasi: Chaukhambha Visvabharati, 1999, 2000, 2001.
- Vangasenasamhitā: Vangasena Samhitā or Cikitsāsāra Samgraha of Vangasena, Text with English Translation, Notes, Historical Introduction, Comments, Index and Appendices by Nirmal Saxena. Chowkhamba Sanskrit Studies CXXV. Vol. I, II. Varanasi: Chowkhamba Sanskrit Series Office, 2004.
- Viṣavaidyasārasamuccaya: Viṣavaidyasārasamuccayam [savyākhyānam], granthakarttāvum: Cerukulappurattu Manaykkal Kṛṣṇan Nampūtiri, vyākhyātāvum: V.M.C. Śaṅkaran Nampūtiri. Tṛśśivapērūr: Maṃgalōdayam Prassil Accaticcatum, 1136 (1961).

English Rendering: *Vishavaidyasarasamuchaya*, Author Cherukulappurath Krishnan Namboodiri, Commentary V.S.Namboodiri, Translation Madhu K P. Thrissur: Ullannoor Mana Trust, 2006.

#### Malayalam Texts

Jyotsnikā: Jyōtsnikā, Viṣavaidyam. Ernakulam: Azad Printers, 2nd ed., 1124 (1948).

Kryākaumudi: V. M. Kuṭṭikr̥ṣṇa Mēnōn, *Kriyākaumudi* (*Bhāṣāviṣavaidyaṃ*). Kottayam: Sahitya Pravarthaka Co-operative Society, 1986.

Prayogasamuccaya: Koccuṇṇi Tampurān, *Prayōgasamuccayaṃ Bhāṣa, Viṣavaidyaṃ*. Koṭuṇṇallūr: Devi Books, 1998; Koccuṇṇi Tampurān, *Prayōgasamuccayaṃ (Viṣavaidyaṃ)*. Tṛśūr: Sulabha Books, 1999.

### Secondary Sources

- Dutt, U. C., [1922], *The Materia Medica of the Hindus* with a Glossary of Indian Plants by George King with Additions and Alterations by Kaviraj Binod Lall Sen & Kaviraj Athutosh Sen. Second ed., Calcutta. Reprint ed., Delhi: Mittal Publications, 1989.
- Gundert, H., [1872], *Malayalam-English Dictionary*. First ed.: Mangalore. Fifth Reprint ed., New Delhi: Asian Educational Services, 1999.
- Mencher, Joan p. & Goldberg, Helen [1967], "Kinship and Marriage Regulations among the Namboodiri Brahmans of Kerala." *Man* 2 (1) pp.87-106.
- Meulenbeld, G. Jan, [1974], *The Mādhavanidāna and Its Chief Commentary Chapters 1-10*. Leiden: Brill.
- [1999-2002], A History of Indian Medical Literature. Vols. IA, IB, IIA, IIB, III.
   Groningen: Egbert Forsten.
- Mooss, Vayaskara N. S., [1983], *Ayurvedic Treatments of Kerala*. Vaidyasarathy Series, Book No.E-5. Kottayam: Vaidyasarathy Press.
- Parpola, Marjatta [2000], *Kerala Brahmins in Transition, A Study of a Nampūtiri Family*. Studia Orientalia 91, Helsinki: Finnish Oriental Society.