



KRIYA KAUMADI-A LITERARY TREASURE

SUNITHA G^{1*}, GAZALA HUSSAIN², ARYA SUBHASH³

1: Assistant Professor, Department of Agada Tantra, Sri Dharmasthala Manjunatheswara

College of Ayurveda & Hospital, Hassan, Karnataka, India

2: Associate Professor, Department of Rasashastra & Bhaishajya Kalpana, Sri Dharmasthala

Manjunatheswara College of Ayurveda & Hospital, Hassan, Karnataka, India

3: 3rd year pg scholar, Department of Agada Tantra, Sri Dharmasthala Manjunatheswara

College of Ayurveda & Hospital, Hassan, Karnataka, India

***Corresponding Author: Sunitha G: E Mail: sunithagopakumar1@gmail.com**

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ABSTRACT

Agada tantra is one of the eight branches of Ayurveda that deals with toxicology. Many text books dealing with agada tantra (toxicology) written in various regional Indian languages are found. In ancient period, many toxicological books were written by eminent scholars of Kerala. As the book is written in the local language Malayalam not all interested in understanding traditional aspects of visha chikitsa (toxicology) can understand. Hence an effort is put by few scholars to translate the treatises into English, but many are yet to see the light. Kriya Kaumadi is one of the books written in Malayalam language that has explained in detail about the treatment aspect of visha (poison). The author explains in detail about samanya chikitsa (general treatment modalities of poison) and yogas (formulations for poison) for both animate and inanimate poison. He gives a thorough knowledge about sthavara visha (plant poison), sodhana of metals (purification of poisons), upavisha (plant poison), ratnas (gemstones) and visha chikitsa sampradaya (traditional practices of poison) in Kerala.

Keywords: Agada tantra, Kriya Kaumadi, Visha, Sthavara visha, Sodhana

INTRODUCTION

Agada tantra (toxicology) is one among the ashtangas of ayurveda. It deals with study of different poisonous bites and its management. There was a separate visha chikitsa sampradaya in kerala. The visha vaidhyas in kerala used some manuscript and books which they maintained as family secret and passed on through generation as hereditary asset [1]. With the surge in human population, it led to a situation where snakes were forced to share its habitat with humans. Thus the incidence of snake bites increased which marked the beginning of a Visha Vaidya Parampara (legacy) of Kerala. A unified code of practice of Visha Vaidya (physician) was established only after the arrival of texts like Vishavaidya Jyotsnika, Vishanarayaneeyam, Kriya Kaumadi, Prayoga Samucchayam, etc. Among these, Kriya Kaumadi is the most popular and widely practiced book [2]. In this book author detail explains the lakshanas and treatment of different type of poisonous bites, the formulation used for poisonous bites, stavara visha and its treatment, sodhana of metals, minerals, rathnas, upavisha, mahavisha, keraliyya visha sampradhaya, etc. The author included a separate anubandha chapter for meaning of the words used throughout the text book.

About the author

VM Kuttikrishna Menon

Born as the son of the literary genius Kochi Rama Varma Appan Thampuran and Venkidang Ambattu Vadakke Mudavakkaattu Nani amma in the month of Thulam 1083 (1908 October), Uthtrattathi nakshatra in Trissivaperur. After his education at Trissivaperur, he graduated from the Arts College, Thiruvananthapuram with a degree in B.A. Malayalam and Sanskrit. He was the first research student in Malayalam Department of the University of Madras. He was invited to deliver the 'Chathu Panicker Memorial Lecture' held annually at Maharaja's College, Ernakulam. After his father's death, he worked for a while at Tripunithura Sankrit College and Ernakulam Maharaja's College as a speaker which was later discontinued due to the pressure of family matters. During the student life and beyond, he learned Toxicology and Pediatrics from many teachers. He was a member of the editorial board of Mangalodayam magazine. He has also served as the Panchayat President in Venkidang. He is the author of many essays on prose and verse. He has published two books, 'Keralathile nadanakala- athinde uthbhavavum valarchayum', translation and commentary on 'Ashtanga Hrudaya Sutrasthana'.

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Visha samanya prakarana adhyaya (Table 2)

Author begins this chapter by explaining twelve gunas (properties) of visha, action of visha and its treatment

Properties of visha

- Laghu (light)
- Ruksha (dry)
- Teekshna (sharp)
- Ushna (hot)
- Avyaktha rasa (unknown taste)
- Aashu (spreads fast)
- Vyavayi
- Visada
- Sukshma (minute)
- Apaki

Yogas mentioned in visha samanya prakarana adhyaya

Brihatpancha nimba churna: This churna is indicated in visha (poison), visarpa

(erysipelas), vrana (wound), nadvirana, siro roga (diseases of head), etc. and anupana is said as tiktaka ghrita, kadira kwatha, honey

Mritasanjivana agada: This formulation is said to give jeeva (life) to a person who died by visha.

2nd chapter-Uraga visha samanya prakarana adhyaya

In this chapter author has explained 16 types of jangama visha adhishtanas like Drishti, Niswasa, Sparsha, Damshttra, Mukha, Nakha, Asthi, Moothra, Mala, Sukra, Laala, Roma, Raktha, Arthava, Sukra and Sava

Damsa bheda (types of bite) are said as Sarpidam- contains four bite mark, damsas is deep, bleeding less and there will be formation of granti; Raditha- site of bite is sweta (white), neela (blue), harita (green) in colour, alpa sophas (less inflammation) at the site of bite and Nirvisha- that does not produce any vikara (discomfort).

Table 1: Chapters and contents of Kriya Kaumadi

Sl. No.	Chapter name	Contents
1	Visha samanya prakarana	Visha samanya guna (General properties of poison) Visha samanya prathikriya (General treatment of visha) Pancha nimba choorna Mrtha sanjeevani Agada
2	Uraga visha samanya prakarana adhyaya	Damsa bedha (Types of bite) Visha vega Hridayavarana and Dhathu raksha (protecting the heart & tissues)
3	Marana mruta lakshana prakarana	Arishta lakshanas
4	Moorkha visha prakarana	Samanya lakshana of cobra (General signs & symptoms of cobra) Asadhya lakshna Treatment Visha vega chikitsa Types of cobra Yogas for cobra bite

5	Mandala visha prakarana	Types of mandali Lakshanas of mandala visha Mandala visha samanya chikitsa Mandala visha upadrava chikitsa
6	Rajila visha prakarana	Rajila visha samanya lakshanas Types of rajila Treatment of rajila visha Rajila visha upadrava and treatment
7	Vyantharadi visha prakarana	Vyanthara visha lakshana Vyanthara visha chikitsa Yogas for vyanthara visha
8	Uruga visha samanya chikitsa prakarana	Different yogas for visha
9	Uruga visha upadrava prakarana	Samanya chikitsa of uruga upadravas
10	Uruga visha upadrava prakarana	Upadravas of uruga visha, and its treatment
11	Kriya karma prakarana	Different kriya karmas for vishasyogas
12	Aakhu visha prakarana	Aakhu visha samanya lakshanas, asadhya alakshnas, Mooshika visha dhatugata lakshanas, Samanya chikitsa, Mooshika visha upadrava chikitsa
13	Chathushpadadi visha prakarana	Alarka visha lakshana, Samanya chikitsa, Treatment of alarkka visha upadrava, Go visha, Sardoola vrisha, bite due to beer, horse, elephant, etc.
14	Keetadi visha parakarana	Vrischika visha lakshanas and treatment, Loota visha lakshanas and treatment, poison due to Grhagodhika, Manduka, Mashaka, Uchittinga, Pipeelika and Jalouka
15	Kshudra visha prakarana	Manushya danta visha, Marjara visha, Nakula visha, Nakra visha, Mathsya visha, Manduka visha, Nagha dantha visha
16	Stavara visha prakarana	Sthavara visha samanya lakshanas, Sthvara visha chikitsa, Kai visha, Dooshi visha, Jala sudhikarana yoga, etc.
17	Anubandham 1	Sodhana of metals, minerals, ratnas, upavisha, mahavisha, etc.
18	Anubandham 2	Keraleeya visha sampradaya
19	Anubandham 3	Meaning of words used in the text book

Table 2: Action of visha guna

S. No.	Visha guna	Visha karma
1	Ruksha	Vata prakopa (aggravates vata dosha)
2	Ushna	Pitta rakta prakopa (aggravates pitta & rakta) Develop moha (Fainting)
3	Teekshna	Affect all marmas
4	Sukshma	Visha will move to sukshma srotus and vitiates rakta
5	Aashu	Jeevahani (Death)
6	Vyavayi	Spread of visha throughout the body
7	Vikasi	Dosha, dhatu, mala kshaya
8	Vaisadhya	Visha spread to the body without any obstruction
9	Laghu	Difficult for chikitsa
10	Avipaki	Not get digested in the body

Table 3: Visha samanya chikitsa

S. No.	Dosha	Treatment
1	Vata	Swedana, intake of dadhi (curd) prepared with tagara (<i>Valeriana wallichii</i>) and kushta (<i>Saussurea lappa</i>)
2	Pitta	Ghrita (Ghee), Madhu (Honey), Paya (milk) dhara and avagaha with jala (Water)
3	Kapha	Intake of Kshara agada Swedana (sudation) Sira vyada (venesection)

Table 4: Visha damshtra- Four types of fangs

Fangs	Properties
Karali	Kala agaru (<i>Aquilaria agallocha</i>) sama gandha, swalpa visha
Makari	Visha can be easily removed
Kala ratri	Vrana is having Chandana gandha (<i>Santalum album</i>), visha is yathna sadhya (treatment is possible)
Yamadhothika	Swelling, ksheera gandha, blood is blue in colour, asadhya (treatment is impossible)

Types of bite

Nirvisha: Bite due to bhaya, it is straight or curved

Alpa visha: Straight bite contains laala (saliva)

Prana nashaka: Bite effects raktavahini sira and having three damshtra

Krishna visha- Causes mamsakanda cheda (tearing of muscle)

Author has also explained the concept of Hridayavarana and the drugs used for protection of hridaya

Drugs used for Hridayavarana

- Paya (Milk)
- Madhu (honey)
- Ghrita (ghee)
- Gomaya swarasa (cow dung), go ghrita (cow's ghee), sireesha (*Albizia lebbek*), arka mula (*Calotropis procera*) and ksheera (milk)
- Maricha choorna (*Piper nigrum*) and ghrita
- Saindhava lavana (rock salt)

Chapter 3

In this chapter author explained the arishta lakshanas before death

Chapter 4

In this chapter author explained samanya lakshana of darvikara bite (cobra), asadhya lakshana (signs and symptoms), treatment, visha vega chikitsa (treatment of stepwise

manifestation), types of cobraand yogas (formulations) for cobra bite.

Samanya lakshana of darvikara damsha

(General signs and symptoms of cobra bite)

The main signs and symptoms in cobra bite are damsa sophā (inflammation at the site of bite), krishna rakta aagama from damsa (oozing of blackish blood from the site of bite), laala srava (salivation), bending of sira (head), difficulty in sravana (hearing), akshi (eye)turns red in colour and difficulty in breathing. The asadhya lakshanas of cobra bite are blood vomiting, excessive fever and swelling of the eye.

Types of cobra-26

Author has explained 26 varieties of cobra in this chapter. They are Krishna sarpa, Sweta sarpa, Sanka paala, Sarva Krishna, Kakodara, Maha karna, Maha Padma, Girikarna, Vata karna, Cheera karna, Kapotha, Lohitha, Kundi nasa, Trina sosha, Thittiri visha, Maha sarpa, Kukkuda ahivisha, Parisarpa, Akanda, Chitra pushpa, Darbha pushpa, etc.

Signs and symptoms and treatment of cobra bite

In case of karimoorkhan bite (black cobra)the main symptoms are bhrama of the body, daha (thirst), and weakness of the body. In this condition punarnava moola(*Boerhavia diffusa*) boiled in milk can be drink. In case of chardi (vomiting) due to cobra bite Pippali (*Piper longum*) can be given with honey. Nasya can be

done with nirgundi(*Vitex nigundo*), sigru (*Moringa oleifera*), dronapushpi (*Leucus aspera*) cure all type of cobra bite. Lepa of arka leaves (*Calotropis procera*) and hingu (*Ferula asafoetida*) cure the shopha (swelling) due to cobra bite. Arka leaves and saindhava lavana make into a pishta form with chandana vari (*Santalum album*) application of this lepa cure all type of cobra bite.

Yogas for cobra bite

- **Neervala tailam-** Application of this oil on the tongue cures cobra bite
- **Mayuranda gutika-** To be given with ushna jala (hot water)
- **Vajra gutika-** Given with ginger guice, this gutika can be given as nasya (nasal inhalation) and anjana (collyrium) along with dronapushpi swarasa (*Leucus aspera*), manushya stanya (breast milk) cures cobra bite.
- **Garalaghna gutika-** Given with tulasi swarasa (*Ocimum sanctum*), coconut milk, or cow's milk cures all type of cobra visha
- **Agasthya kuzhambu-** apply at the site of bite cures cobra bite

Moorkha visha upadrava chikitsa

- In condition of Shopha (inflammation) and daha (burning sensation) - Chandana

dhara (*Santalum album*) cures this condition

- In condition of Kandu (itching), vrana (wound), visphota due to cobra bite- Lepa of dattura beeja (*Datura alba*) added with kushta (*Saussurea lappa*), vacha (*Acorus calamus*), tagara (*Valeriana wallichii*), chandana (*Santalum album*)
- In condition of Baddha mala due to darvikara visha- Intake of eranda taila added with saindhava lavana (rock salt), haritaki (*Terminalia chebula*) and ghee
- Ragata (redness) of netra – Application of swarasa prepared with pulp of kupilu (*Strychnus nuxvomica*) triturated with juice of pata (*Cyclea peltata*)

Chapter 5

In this chapter author has explained different types of mandali (viper), lakshanas (signs & symptoms) of mandala visha, mandala visha samanya chikitsa (general line of treatment), mandala visha upadrava (complications) and chikitsa (treatment). The common signs and symptoms of mandala visha are teevra vedana (excessive pain), maha sophha (excessive swelling), swedana (sweating), chardi (vomiting), raktha will come from different orifice of the body, formation of

wound, loss of vision, sira soola (headache), Krishna, peeta varnata of angas (whitish- yellowish discolouration of body parts), burning sensation all over the body, etc.

Types of mandala sarpa-16 type

They are Sweta, Kushta, Kudila, Mahan, Soochi theekshna, Krishna, Pishacha, Hema, Visarpa, etc. Author has also explained the signs and symptoms of each mandala sarpa.

Samanya chikitsa of mandala visha

- Ghrita processed with Hingu (*Ferula asafoetida*), Thippali (*Piper*

longum), Vacha (*Acorus calamus*), Pata (*Cyclea peltata*)

- Vyosha (*Piper longum*, *Piper nigrum*, *Zingiber officinale*) added with triphala (*Terminalia chebula*, *Terminalia bellerica*, *Emblica officianalis*), saindhava lavana (rock salt), mahisha ghrita (buffalo's ghee) and honey
- Intake of saindhava lavana (rock salt) and jeeraka (*Cuminum cyminum*)

Table 5: Mandali visha upadrava chikitsa (Treatment of complications due to viper bite)

Upadrava	Chikitsa
Vrana (wound)	Lepa (anointment) with juice of dhatura leaf (<i>Datura alba</i>) Application of tila taila (gingely oil), kera taila (coconut oil)
Sopha (inflammation)	Katutraya pana (<i>Piper longum</i> , <i>Piper nigrum</i> , <i>Zingiber officinale</i>) and lepa (application) Lepa of Sweta arka (<i>Calotropis procera</i>) added with snuhi (<i>Euphorbia nerifolia</i>) and punarnava mula (<i>Boerhavia diffusa</i>) triturated with gomutra (Cow's urine)
Chardi (vomiting)	Juice of Bhumyamalaki (<i>Phyllanthus niruri</i>)
Rakta srava (bleeding)	Intake of ghrita processed with Chandana (<i>Santalum album</i>), Shatavari (<i>Asparagus recemosus</i>) and Yashtimadu (<i>Glycyrrhiza glabra</i>)
Rakta srava from roma koopa (bleeding from hair root)	Pana (intake) of Shirisha twak (<i>Albizia lebbek</i>) boiled in go dugdha (Cow's milk)
Rakta vamana (hematemesis)	Paal kashayam prepared with ushira (<i>Vetivera zizanoids</i>) and bala (<i>Sida cordifolia</i>)
Karna rakta	Lepa of Bilva patraswarasa (<i>Aegle marmelos</i>) added with navaneeta (butter) on ear
Nasagata rakta (bleeding from nose)	Lepa of Patola patra swarasa (<i>Trichosanthes dioica</i>) added with navaneeta (butter) on sira (head)
Rakta from danta (bleeding from teeth)	Chewing of boiled kushmanda (<i>Benincasa hispida</i>) with out adding salt
Adoga ratha	Intake of Shatavari kashaya (<i>Asparagus recemosus</i>) added with honey
Peeta mutra (yellowish urine)	Intake of karanja kashayam (<i>Pongamia pinnata</i>)
Unmada (Psychosis)	Pana of ushira (<i>Vetivera zizanoids</i>), chandana (<i>Santalum album</i>) Anjana with vyosha (<i>Piper longum</i> , <i>Piper nigrum</i> , <i>Zingiber officinale</i>)
Trishna (Thirst)	Shadanga kwatha
Sandhi sada (stiffness of joints)	Intake of punarnava (<i>Boerhavia diffusa</i>) with hot water

Chapter 6

Rajila visha prakarana

In this chapter author has explained Rajila visha (krait bite) samanya lakshanas, types of rajila, treatment of rajila visha, rajila visha upadrava and treatment. The main signs and symptom in rajila visha are swasa rodha (difficulty in breathing), malasanga (constipation), jwara (fever), lomaharsha (horripilation), chardi (vomiting), sirashula (headache), aruchi (anorexia), kasa (cough), etc.

Types of rajila sarpa

Pundareeka, Karelaka, Chitraka, Kardama, Trina sosha, Lodra pushpa, Divyelaki, Lohitaksha, Krishna raji, Vellikettan etc

Rajila visha samanya chikitsa (Table 6)

- Intake of powder of thippli (*Piper longum*) along with milk and honey
- Lepa of Sariva (*Hemidesmus indicus*) along with nara mutra (Human urine)
- Lepa of nara mutra along with sunthi (*Zingiber officianale*) and triphala (*Terminalia chebula*, *Terminalia bellerica*, *Embelica officianalis*)
- Lepa of root of Kupilu (*Strychnus nuxvomica*) added with neeli mula (*Indigofera tinctoria*) and ashwagandha (*Withania somnifera*) triturated with kanji (sour gruel)

- Nasya with vyosha (*Piper longum*, *Piper nigrum*, *Zingiber officianale*), saindhava lavana (Rock salt).

Chapter 7

Vyantharadi visha prakarana

In this chapter author has explained Vyanthara visha lakshana (breed snake), Vyanthara visha chikitsa (treatment) and formulations for vyanthara visha

Samanya lakshnas of vyanthara (General signs and symptoms)

Ruja (pain) all over the body, swelling of eyelid, jwara (fever), rakta srava (bleeding) from nasa (nose) and netra (eye) and causes vitiation of all doshas

Samanya chikitsa of vyanthara sarpa (General treatment)

Intake of milk processed with root of neelini (*Indigofera tinctoria*)

Intake of ushira (*Vetivera zizanoids*) added with chandana (*Santalum album*), athivisha (*Aconitum heterophyllum*), vyosha (*Piper longum*, *Piper nigrum*, *Zingiber officianale*)

Vyanthara visha upadrava chikitsa (treatment of complications)

Application of paste prepared with lakshmana (*Ipomoea sepiaria*) and navaneeta (butter) on tongue

Formulations for vyanthara visha

- Ashwagandhadi gutika- for nasya and sarvanga lepa
- Mustadi churna

Chapter 8

Uraga visha samanya chikitsa prakarana

In this chapter author explained different yogas for snake bite. Like Mrita sanjivani kuzhamb, Rasa gulika, Taruna bhaskara, Bilvadi gutika, Vishahari lehya, etc.

- Visha kallu-The visha kallu(stone) should keep at the site of bite. So that it will adsorb poison and the stone will become in dark colour after this procedure it should be keep in milk, so that the visha will diffuse to the milk.

- Pancha sireesha agada- Application with tambula rasa (Piper betel) or nimba taila (oil of Neem) on tongue
- Mohanashini tailam-Application on head removes the visha (poison)
- Kshara agada

Chapter 9- Uraga visha upadrava prakarana (Table 7)

In this chapter author has mentioned upadrava of uraga visha (reptiles) and its treatment.

Table 6: Rajila visha upadrava chikitsa (treatment of complications)

Upadrava	Treatment
Kapha vridhhi	Intake of Sunthi juice (<i>Zingiber officianale</i>) added with maricha (<i>Piper nigrum</i>) and honey
Chardi	Intake of Mrith added with anjala kallu, thippali (<i>Piper longum</i>), dadima swarasa (<i>Punica granatum</i>)
Moha	Lepa of vacha (<i>Acorus calamus</i>), kushta (<i>saussurea lappa</i>), tagara (<i>Valleriana wallichii</i>), aamra (<i>Indigofera tinctoria</i>), haridra (<i>Curcuma longa</i>) and daruharidra (<i>Berberis aristata</i>)
Mala bandha	Intake of naga danti kashaya (<i>Croton tiglium</i>) with shunti (<i>Zingiber officianale</i>), haridra (<i>Curcuma longa</i>), lemon juice and go mutra (Cow's urine)

Table 7: Uraga visha upadrava (Complications of reptile poison)

S. No.	Upadrava	Treatment
1	Jwara	Pana of Katurohini (<i>Picrorhiza kurroa</i>) mix with sugar and tandulodaka
2	Kasa	Intake of yashtimadhu (<i>Glycyrrhiza glabra</i>) and manjishta (<i>Rubia cordifolia</i>) churna
3	Chardi	Intake of ashvattha (<i>Ficus religiosa</i>) mixed with honey and sugar
4	Hikka	Intake of Chitraka churna (<i>Plumbago zeylanica</i>) mixed with honey
5	Murcha and Trishna	Lepa of ikshu rasa (<i>Saccharum officinarum</i>)/milk
6	Visha vrana	Nalpamara lepa (<i>Ficus caria</i> , <i>Ficus infectoria</i> , <i>Ficus religiosa</i> , <i>Ficus bengalensis</i>)
7	Vataja apasmara	Intake of ghee and oil
8	Rakta srava	Intake of satavari kashaya (<i>Asparagus recemoso</i>) added with honey
9	Baddha mala	Pathya kwatha (<i>Terminalia chebula</i>)
10	Mutrarodha	Dhara with kanji (sour gruel) below nabhi (umbilicus)
11	Shopha	Lepa of root of vacha (<i>Acorus calamus</i>), snuhi (<i>Euphorbia nerifolia</i>), and punarnava (<i>Boerhavia diffusa</i>) triturated with go mutra (Cow's urine)
12	Trishna	Intake of juice of of dadima (<i>Punica granatum</i>) and laja (puffed rice) mixed with honey and sugar

Yogas mentioned for uraga visha

- Ungu taila- lepa on sandhi (joints), shiras (head) and be used as paana

(oral administration) and nasya (inhalation)

- Vishanthaka tailam

Chapter 11 -Kriya karma prakarana

In this chapter acharya has explained different kriya karma (treatment modalities) for visha like nasya (nasal therapy), anjana (collyrium), vamana (emesis), virechana (purgation therapy), rakta mokshana (blood letting), sarvanga dhara, etc.

Vamana

If snake bite is above nabhi (umbilicus) - vamana is indicated using madana phala (*Randia dumetorum*), apamarga (*Achyranthes aspera*), haritaki (*Terminalia chebula*) and saindhava (rock salt)

Virechana

If a pitta prakriti person is bitten by a paittika snake (mandali) below nabhi (umbilicus) then virechana should be performed by using kwatha prepared with trivrit (*Operculina turpethum*) and triphala (*Terminalia chebula*, *Terminalia bellerica*, *Emblica officianalis*)

Yogas mentioned

- Uthali gutika-nasya with drona pushpi (*Leucus aspera*)/ nagavalli swarasa (*Piper betel*)
- Patola manibadra lehyam
- Dasapushpadi ghrita
- Lakshadi ghrita
- Pathyadi ghrita, etc.

Chapter 12- Aakhu visha prakarana

In this chapter author has explained Aakhu visha (rat poison) samanya lakshanas

(general signs & symptoms), asadhya lakshanas, mushika visha dhatugata lakshanas, samanya chikitsa (general line of treatment) and mushika visha upadrava chikitsa (management of complications).

Aakhu visha samanya lakshana

Aakhu visha is spread through nakha (nail), dashtra (bite), sukla, mala (faeces), mutra (urine) and sava (saliva) of mushika. There will be jwara (fever), sophia (inflammation), aruchi (anorexia), moha (delirium), formation of granthi (tumour), panduta (palour), roma harsha (horripilation), burning sensation of both hands and feet and development of karnika (ring like muscular growth)

Asadhya lakshanas

Sarvanga sophia (Inflammation all over the body), Murcha (Fainting), Badhirata (Deafness), Rakta chardi (Blood vomiting), Soona basti (Inflammation of urinary bladder), Discolouration of lips and formation of granthi (Tumour) resembles mushika

Samanya chikitsa

Agnikarma with swarna or tamra at the site of bite is said to be done. After agnikarma raktamokshana should be done and panchasireesha (*Albezia lebbek*) and darvi (*Berberis aristata*) at the site of bite to be applied.

Table 8: Mushika dhatu vega chikitsa

Vega	Dhatu	Lakshanas	Chikitsa
1	Rasa	Kandu (Itching) Ruja (Pain)	Raktamokshana, Paana of sireesha panchanga (<i>Albezia lebbeck</i>) with buttermilk
2	Raktha	Daha (Burning sensation),Horripilation ,Granthi, Swelling of eyelid	Jalouka avacharana Lepa with shireesha(<i>Albezia lebbeck</i>)
3	Maamsa	Red colour of mutra, shira shula (Head ache), Jwara (Fever)	Paana of milk processed with ankola (<i>Alangium salvifolium</i>)
4	Meda	Granthi (tumour), sandhi toda (joint pain)	Lepa of shireesha (<i>Albezia lebbeck</i>) Nasya with sireesha sara
5	Asthi	Daha (burning sensation), chardi (vomiting)	Paana and nasya of oil processed with bhringaraja (<i>Eclipta alba</i>)
6	Majja	Ruja (pain), daha (burning sensation), moha (delusion), andhata (blindness)	Nasya with sireesha sara (<i>Albezia lebbeck</i>)
7	Sukra	Moha (delusion), marana (death)	Intake of oil processed with shalmali (<i>Bombax ceiba</i>)

Table 9: Mushika visha upadrava chikitsa

S. No.	Upadrava	Chikitsa
1	Jwara	Pana of purana ghritha Vishama jwara chikitsa
2	Sopha	Lepa of Datura seeds (<i>Datura alba</i>) mixed with kanji (sour gruel)
3	Vedana	Lepa of shatavari (<i>Asperagus recemosa</i>), shigru (<i>Moringa oleifera</i>) make in to a paste with kanji (sour gruel)
4	Sheetata of body	Intake of musta (<i>Cyperus rotundus</i>) with honey
5	Karnika	Lepa of manjishta(<i>Rubia cordifolia</i>), haridra(<i>Curcuma longa</i>), tagara (<i>Valleriana wallichii</i>), grihadhuma with saindhava lavana (rock salt)
6	Roma harsha	Lepa of shirisha panchanga (<i>Albezia lebbeck</i>)
7	Trishna	Paana of milk processed with ashwagandha (<i>Withania somnifera</i>) and bala (<i>Sida cordifolia</i>)

Chapter 13

Chathushpadadi visha prakarana

In this chapter author deals with alarka visha lakshana, samanya chikitsa, treatment of alarka visha upadrava, go visha, sardoola visha, bite due to bear, horse, elephant, etc.

Alarka visha lakshnas

Alarka visha causes the vitiation of tridoshas. The rabid dog they will not eat or drink anything, the tail will be downward always, leathery froth will come from the mouth and develop fever, the dog fears of water by the sparshana (touch), shabda (sound) and drishya of water. This condition is known as jala santrasa. Such rabid dog

should be tied under lemon tree and observe the dog for twelve days. The person who is bitten by rabid dog will develop nidra nasha (loss of sleep), jwara (fever), pain in throat, feeling of cold all over the body, redness of both eyes, phena aagama (froth) from mouth.

Alarka visha kriya karma

Virechana with milk mix with eranda taila (castor oil)

Vamana to be performed by using yogas mentioned in aakhu visha

Pathya apathy in alarka visha

The patient should avoid all lemon varieties, kuhmanda (*Benincasa hispida*),

chicken, takra (buttermilk), atiamla ahara (sour food), spicy items, atilavanabojana (salty diet), for 3 months. It is advisable to take ghrita, navaneeta (butter), shashtika rice processed with milk and sugar, and food prepared with godhuma (wheat)

Alarka visha Samanya chikitsa

Paana water boiled with tulasi mula (*Ocimum sanctum*) and chandana (*Santalum album*)

Virechana aushadhas should be given with arka ksheera (*Calotropis procera*)

Koshna Dhara with ghrita and shireesha panchanga (*Albezia lebbeck*)

Intake of punarnava (*Boerhavia diffusa*) mix with vacha (*Acorus calamus*) datura seeds (*Datura alba*), etc.

Treatment of cow if bitten by rabid dog

Pana and lepa of trikatu (Piper longum, Piper nigrum, Zingiber officinale), vacha (*Acorus calamus*), pancha sireesha (*Albezia lebbeck*), haridra (*Curcuma longa*), daruharidra (*Berberis aristata*), neeli mula (*Indigofera tinctoria*), given with kanji (sour gruel)

Treatment of bite of hungry dog

Lepa of oil processed with ankola (*Alangium salvifolium*)

Lepa of of danti mula (*Croton tiglium*) mix with gomutra (Cow's urine)

Bite by wolf/tiger

Intake of ghrita processed with datura (*Datura alba*), haridra (*Curcuma longa*) and tulasi swarasa (*Ocimum sanctum*)

Go visha (Cow)

Lepa of triphala (*Terminalia chebula*, *Terminalia bellerica*, *Embllica officianalis*), arka (*Calotropis procera*), haridra (*Curcuma longa*) with milk

Ashwa visha (horse)

Pana and lepa with ashwagandha (*Withania somnifera*), vacha (*Acorus calamus*), lodhra (*Symplocos racemosa*) with milk

Gardhabha visha (donkey)

Intake of musta (*Cyperus roduntus*), chandhana (*Santalum album*), ushira (*Vetivera zizanoids*), jatamamsi (*Nardostachys jatamansi*) with milk

Ushtra visha (camel)

Lepa of Badara root (*Aerva lanata*), vacha (*Acorus calamus*), nisha (*Curcuma longa*) with kanji (sour gruel)

Chapter 14-Keetadi visha prakarana

In this chapter author explains about vrischika visha lakshanas and treatment, lootha visha lakshanas and treatment, poison due to grhagodhika (lizard), manduka (flies), mashaka (mosquito), uchittinga (crab), pipeelika (ants) and jalouka (leech).

Types of vrischika-total 67

Vata- 18 type

Pitta- 24 type

Kapha-13 type

Sannipata- 12 type

Samanya lakshanas of Vrischika

Blackish discolouration at the site of sting, feels like burnt by fire, visha will move in

the upward direction later it is localized at the site of bite, vomiting, if visha reaches blood there will be diarrhoea, fever and dyspnoea.

Samanya chikitsa of Vrischika

- Dhara with cold water, ghrita processed with saindhava
- Dhooma with dhooma dravya added with nimba tailam
- Pana of honey and ghrita

Luta visha

Types

1. Manda visha-death with in 15 days
2. Madhyama visha-death with in 10 days
3. Ghora visha-death with in 7 days

In luta visha there will be development of jwara (fever), sandhi toda (joint pain), moha (delirium), daha (burning sensation), kasa (cough), etc.

Table 10: Alarka visha upadrava chikitsa (Treatment of complications)

S. No.	Upadrava	Treatment
1	Jwara and sophia	Lepa of haridra (<i>Curcuma longa</i>) with tanduleeyaka
2	Vrana	Dhara with durva swarasa (<i>Cynodon dactylon</i>)
3	Buddhi bhrama	Paana of patra, moola and twak of karanja (<i>Pongamia pinnata</i>)

Table 11: Luta visha vega and treatment

Vega	Dhatu affected	Lakshana	Chikitsa
1	Rasa	Kandu, krishnata of damshastana	Raktamokshana Lepa of tulasi swarasa (<i>Ocimum sanctum</i>)
2	Raktha	Romancha (horripilation)	Paana of milk processed with tulasi (<i>Ocimum sanctum</i>)
3	Maamsa	Sopha (inflammation), trishna (thirst),	Yashtimadhu (<i>Glycyrrhiza glabra</i>), chandana (<i>Santalum album</i>) lepa and pana
4	Meda	Sopha (inflammation), jwara (fever)	Lepa of sireesha (<i>Albizia lebbek</i>)
5	Asthi	Gathra sada (weakness of body)	Paana of Milk processed with agasthya (<i>Sesbania grandiflora</i>)
6	Majja	Sira shula (headache), moha (delusion), jwara (fever)	Paana of milk processed with neelini (<i>Indigofera tinctoria</i>), ushira (<i>Vetivera zizanoids</i>), chandana (<i>Santalum album</i>)
7	Sukra	Trishna (thirst), moha (delusion), indriya sada (impairment of sense organ)	Nasya and anjana with sidhoushada

Pathya apathya in luta visha

Lavana (salt), amla (sour), matsya (fish), mamsa (meat), tila tailam (gingely oil)

Pathya- Go ghrita (Cow's ghee)

Yogas for luta visha

- Devadarvyadi gutika
- Mahapadmaka ghrita

- Lodradi lehya

- Neelidaladi ghrita

Griha godhika visha treatment

Lepa of snuhi (*Euphorbia nerifolia*), arka (*Calotropis procera*), tippali (*Piper longum*), haridra (*Curcuma longa*) and amra (*Mangifera indica*)

Satapadi visha (centipede)

Lepa of slaked lime at the damsha sthana (site of bite)

Lepa of gunja (*Abrus precatorius*) seed

Maduka visha

Paana of ajamoda (*Apium graveolens*) mixed with hingu (*Ferula asafoetida*)

Pipeelika visha (Ants)

Lepa and paana of tippali (*Piper longum*), shunti (*Zingiber officianale*) and nisha (*Curcuma longa*)

Mashaka visha (flies)

Lepa of triphala (*Terminalia chebula*, *Terminalia bellerica*, *Emblica officianalis*) added with go mutra (Cow's urine)

Yogas for keeta visha

- Dashanga gutika
- Gandhaka lehya

Chapter 15- Kshudra visha prakarana

In this chapter author explains about manushya danta visha (toxic effect caused due to human bite), marjara visha, nakula visha, matsya visha (fish), manduka visha (frog), naga danta visha (snake teeth). Author described that paana of ghrita, navaneeta, and milk removes manushya danta visha.

Chapter 16-Sthavara visha prakarana

In this chapter author explains about sthavara visha samanya lakshanas, sthavara

visha adhishtana anusara lakshanas (signs & symptoms caused due to plant poison), sthavara visha chikitsa (treatment of plant poison), kai visha (gara visha), dushi visha, asuddha bogya chikitsa, jala suddhikarana yoga (recipes for water purification), etc.

Yogas used insthavara visha chikitsa

- Satadhouta grtha
- Yaapana agada
- Kaudilyadayita agada
- Ajita agada
- Ajeya ghrita

After explaining about sthavara visha author has given the detail description about kai visha and dushi visha. He has described that when neelini mula (*Indigofera tinctoria*) mixed with milk is applied on the udara (abdomen) and if this lepa dries up quickly kaivisha (gara visha) is not affected to that person.

Treatment of kai visha

Deha shuddhi (purification of the body) using vishaghna aushadhas (anti-poisonous formulations)

Patola churna (*Trichosanthes dioica*) mix with hot water/buttermilk

Paana milk processed with pata (*Cyclea peltata*), etc

Table 12: Sapta visha prathisheda-treatment of seven type of upavisha

S. No.	Upavisha	Treatment
1	Datura(<i>Datura alba</i>)	Intake of milk and sugar Intake of nalikera jala with chandana (<i>Santalum album</i>)
2	Arka (<i>Calotropis procera</i>)	Tila kashayam (<i>Sesamum indicum</i>)
3	Ahiphena (<i>Papaver somniferum</i>)	Vamana using ushnambu (Hot water) Intake of buttermilk processed with bimbi (<i>Coccinia grandis</i>)
4	Karaveera (<i>Nerium indicum</i>)	Paana of mahisha ksheera (buffalo's milk) with sita (sugarcandy)
5	Snuhi (<i>Euphorbia nerifolia</i>)	Sita added to sudha udaka If latex falls on eyes- goghrita seka (cow's ghee)
6	Gunja (<i>Abrus precatorious</i>)	Intake of Kumuda kashayam (<i>Nymphaea stellate</i>) with ghrita
7	Langali (<i>Gloriosa superba</i>)	Vibhitaki kashayam (<i>Terminalia bellerica</i>)

Author has included three anubandham chapters at the end of the chapter.

Anubandham 1

In this chapter author has explained about doota lakshanas (messenger)

Anubandham 2

In the second chapter of anubandha author explains about shuddhi vidhi(purification process) of parada (mercury), gandhaka (sulphur), haritala (arsenic), tuttha (copper), abhraka (borax), naga (lead), vanga (tin), swarna (gold), rajata (silver), mandoora (iron), gairika (red ochre), guggulu (*Commiphora mukul*), vatsanabha (*Aconitum ferox*), hingu (*Ferula asafoetida*), saindava, pippali (*Piper longum*), souveeranjanam, srotanjanam, all upavisha, ratnas, etc.

Anubandham 3

In this anubandha author explains about visha vaidhya sampradaya in kerala

Anubandham 3

In the 3rd anubandha author has explained the meaning of words used in the text book (dictionary).

DISCUSSION

Visha chikitsa (toxicology) is given highest importance among the branches of medicine owing to its need for emergency management. The physician who treats poisonous bite victim needs to be careful and confident. Slightest mistake can risk the life of the patient. There are many traditional vaidyas who are successfully treating poisonous bite cases using herbal medicines and practices even to this day [3]. There are a number of books written in regional languages on Ayurveda. It will be of great use to humanity if they are given greater exposure. It will also help throwing light on the ancient regional practices prevalent in different parts of the

country. Kriya kaumadi is one such book popular in Kerala. It contains many simple and practically feasible formulations which can be easily prepared and used for managing poisoned conditions. In this book author follows proper heading and a correct sequence throughout the text book. Initial stage of the book describes properties of visha its action followed by this an extensive review of visha chikitsa and yogas for different type visha damsha (poisonous bite). This book also gives importance to dhoota lakshanas for the diagnosis of visha also.

The author in detail explains the concept of hridayavarana and drugs used for the protection of heart. The teekshnata of visha which cause karshana of hridaya so for the protection purpose hridayavarana is necessary. For the protection of hridaya ghrita is mentioned by the author. Ghrita is said to possess vishaghna property and having samskarasya anuvartana property. It imbibes the property of other drugs and reduces the visha and give a protective covering to hridaya also [4]. The author explains dosha based treatment for snake bite as darvikara (cobra), mandala (viper), rajjimantha (krait) damsas are vata, pitta and kapha predominant respectively and the author has mentioned vata hara, pittahara and kaphahara drugs for the respective bite [5]. Some formulations mentioned for poisonous bite contains visha dravyas like

haratala, manashila, etc. These drugs have vyavayi and vikasi property that aid in quick absorption in the body. In anubandha chapter the author explains about sodhana of metals, minerals, upavisha, etc. Shodhana helps disintegration of the drug to provide its finer particles so that the drug may be made suitable for further procedure of other special technique viz., jarana, marana, and satvapatana, etc. to obtain product suitable for internal use [6].

CONCLUSION

Kriya Kaumadi is one of the popular and widely practiced books in Malayalam visha chikitsa. It contains many simple and practically feasible formulations which can be easily prepared and used for poisonous bites. Clinical evaluation and conceptualization of matters in this book may impart confidence to the upcoming Agadatantra practitioners. Even today many traditional vaidyas follow this book in their Ayurvedic practice. This book is a valuable reference for academicians and practitioners. The book is written completely in Malayalam, which makes it inaccessible for those who do not understand the language. It contains many simple and practically feasible formulations which can be easily prepared and used for managing poisonous conditions. There is a need of further research on the formulations given in the text in both literature and clinical levels.

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