

FEVER IN CHILDREN - AN AYURVEDIC VIEW

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Abstract: Ayurveda considers fever as major disease but children being delicate and more vulnerable to various disorders due to immature Dhatus and deficient in Bala/Oja, are more prone to fluctuations in temperature. Moreover, the causes of fever also differ than adults. Fever caused due to vitiated breast milk, fever due to seizure by Grahas etc. are entirely different than that of adult fever. Kashyapa has mentioned neonatal (Jatamatra), fever similarly in Kshirapa (breast fed) and Kshiranabhojina (breast + cereal fed) including treatment alongwith congenials and non congenials for infants suffering from fever. Two types of fever (Sama and Vishama) in Sutrasthan, eight types of fever in Nidana Sthana as well as treatment of Jeerana Jwara (chronic fever) in Chikitsa chapter. Fever, as a disease as well as symptom, had been provided utmost status in ancient Ayurvedic texts. Sushruta, while mentioning the status of Jwara as a disease says fever is such a disorders of the living beings that comes in to existence immediately after birth and continues to exhibit its presence till death. Similarly, Charaka Samhita also considers fever as senior most of all disorder.

Key Words: Jwara ,Dhatus, Bala/Oja, Grahas, Kashyapa, Jatamatra, Kshirapa, Kshiranabhojina.

Introduction: The prosperity and development of any country is ultimately based on strong progeny, just like a plinth of any structure is the backbone of its future span. So, the effective health care of pediatric population is similarly vital.

Fever, is the condition when body temperature is elevated in response to the pathological stimulus. Fever, also known as pyrexia, is derived from the Greek¹ word pyretos denoting fire, or else febrile response, having linkage to the Latin word febris, meaning fever. Fever is a common medical sign indicating increase in internal body temperature to levels above normal. Fever can be accurately characterized as a temporary elevation in the thermoregulatory set-point, usually by about 1–2 °C (1.8-3.6 °F). American College of Emergency Physicians (ACEP)² has published clinical policy on febrile children choosing a rectal temperature of $\geq 38^{\circ}\text{C}$ (100.4°F) as the most widely used definition of fever.

Fever³ is a state initiated by an elevation in the thermoregulatory set-point, causing typical body temperature to rise. A feverish child has a generalized feeling of cold despite an increased body temperature, and increases in heart rate, muscle tone and shivering. Basically all are caused by the body's attempts to counteract the newly perceived hypothermia and reach the new thermoregulatory set-point.

As per Atharvaveda⁴ origin of Jwara from Agni present in Amashya. Sushruta Samhita refers causes of Jwara as "Rudra Kopagni". According to Shatpath Brahmana Rudra is considered as Agni. Among eight types of Agni Rudra has been enumerated one of them. Ayurveda although has been considered fever as major disease but children being delicate and more vulnerable to various disorders due to immature Dhatus and deficient in Bala/Oja, are more prone to fluctuations in temperature. Moreover, the causes of fever also differ than adults. Fever caused due to vitiated breast milk, fever due to seizure by Grahas etc. are entirely different than that of adult fever. Ayurveda related material can be traced also in Garuda Purana as Jawara has been termed as king of all disorders and named as Mrityuraja. Similarly, Brahma Vaivarta Purana has mentioned Jwara as superemo of all disorders.

Other ancient texts like Harivansha Purana has provided war between Lord Krishna and Jwara. Agni Purana has describe treatment of general fever.

Fever, although has been considered as major disease in ancient Ayurvedic texts but children being delicate and more vulnerable to various disorders due to immature Dhatus and deficient in Bala/Oja are more prone to fluctuations in temperature. Moreover, the causes of fever also differ than adults. Fever caused due to vitiated breast milk, fever due to seizure by Grahas etc. are entirely different than that of adult fever.

Kashyapa⁵ has mentioned neonatal (Jatamatra) fever, similarly in Kshirapa (breast fed) and Kshiranabhojina (breast + cereal fed) including treatment alongwith congenials and non congenials for infants suffering from fever. Two types of fever (Sama and Vishama) in Sutra sthan, eight types of fever in Nidana Sthana as well as treatment of Jeerana Jwara (chronic fever) in Chikitsa chapter. Unfortunately both chapters, having description of fever, are missing and Chikitsa chapter contains one page only.

Fever, as a disease as well as symptom, had been provided utmost status in ancient Ayurvedic texts. Sushruta Samhita⁶ while mentioning the status of Jwara as a disease is usually present. Fever is such a disorders of the living beings that comes in to existence immediately after birth and continues to exhibit its presence till death. So, is renowned as monarch of all disorders. Similarly, Charka Samhita⁷ also considers fever as senior most of all disorder.

Fever, although has been found one of the many symptoms of various disorders but almost all ancient Ayurvedic texts have described it as major disorder and that too as forerunner because it appeared first of all in human beings.

Presence or absence of fever in any disease is important in terms of diagnosis and treatment because it alters the etio-pathogenesis of disease, naturally its management is also changed. Status of body temperature intensely influences the existence or extinction of life because temperature regulation is vital for continuation of life process for this very reason Jwara has been termed as synonyms of diseases⁸.

Agnivesh⁷ made an enquiry to Acharya Atraya that why fever, which involves the body, sensory organs as well as mind, has been considered by you sir as powerful and senior most of all disorders of living beings. Expressing curiosity regarding Jwara, Agnivesh put series of questions in treatment chapter of Charka Samhita.

I) **Prakriti of Jwara**

Charka says Jwara has two Prakritis

a) Sharirika (Physical)

b) Mansika (Psychic)

Under Sharirika (physical), three Doshas Vata, Pitta and Kapha are involved whereas in Mansika (psychic), Raja and Tama psychic Doshas are the main participants. Both these can also be termed as etiological factors and clarifying it Charka says that the status of body, when there is no vitiation of Doshas, presence of Jwara is impossible. Thus, status of Doshas as causative factors has been considered important. While classifying etiological factors, mainly two types of causative factors, have been enumerated as following:

- 1) **Sannikrishta (proximate) factors** : Vata, Pitta and Kapha
- 2) **Viprakishta (remote) factors** :
 - Mithya Atharavihara: (Non-congenial food and life style.)
 - Asatmendriyarth – samyoga: overuse, misuse, disuse of sensory and other organs.
 - Pragyaparadha: Disobedience of natural decisions of intellect.
 - Parinama (Kala): Non-observance of rules of Dincharya, (day routines), Ritucharya (night-routines) and seasons as described by Ayurvedic texts.

II) **Pravritti (origin of Jwara)**

It implies initiation of Jwara. Charka has explained it in brief manner i.e Pravritti means to take possession or to seize. So, the Jwara originates, when unwanted and irrational possession of irrational materials occurs due to greed, it initiates the Jwara. Yogasutra has also stressed for Aprigraha for healthy living. It may be due to ignorance or undesired lust for non congenial material.

Agnivesha further asked other facts like Prabhava (consequences), Karna (etiological factors), Purvarupa (prodromal symptoms), Adhishthana (site) Lakshana (sign and symptoms) of various types of Jwara, Ama Jwara, Jeerna Jwara (chronic fever), precaution after relief from fever, relapse of fever and management of relapsed fever. Thus, all aspects of fever, starting from etiology to treatment as enquired by Agnivesh, were provided by Atraya.

Prabhava of Jwara:

Usually, the following are the manifestations of Jwara.

- I. Pyrexia (Santapa)
- II. Anorexia (Aruchi)
- III. Thirst (Trishna)
- IV. Bodyache (Angamarda)

Basically, these are the general features of the person suffering from fever. Fever, is a such a disorder where whole body is involved.

Although, being in independent disease, fever is also one of the symptoms of many disorders. Due to this reason no specific etiological factor has been mentioned. Most of the Ayurvedic texts including Charaka samhita⁷ have not provided any specific etiological factor except Sushruta Samhita⁶ who has enumerated few etiological factors for causation of fever.

Types of Jwara can be classified as under briefly:

A. Jwara (Two types)

B.

Starts from body (Physical)
(Physical Dearrangement)

Starts from Manas (Psyche)
(Psychic Dearrangement)
Distraction & Distress

B. Jwara (Two types)

Mild
(Involvement of Vayu & Kapha)

Violent
(Involvement of Vayu + Pitta)

C. Jwara (two types)

Internal impetus

External impetus

- I. Burning Sensation
- II. Thirst
- III. Delirium
- IV. Dyspnoea
- V. Vertigo
- VI. Joint pains
- VII. Suppression of perspiration

- i. Increased excretion
- ii. Lowered thirst

VIII. Retention of Doshas and Malas in the body.

B. Jwara (Two types)

(Natural) Prakritika
Kaphaja fever occurring in Basanta season or Pittika fever in Sharada season, are curable due to seasonal amity.

(Unnatural) Aprakritika
The fever not in accordance with season (Ritu) are not easily curable or incurable, due to non-amity.

E. Jwara (Two types)

Sadhya
(Curable)
Less vitiation of Doshas
Fever with lesser strength
Uncomplicated fever.

Asadhya
(Incurable)
- Multiple etiological factors
- Multiple sign & symptoms
- Associated with Dyspnoea.
High grade fever with vertigo and delirium
Weak person.

F. Jwara According to Diurnal variation: (Five Types)

- 1) Santata (Continuous or remittent) Rasava Srotas.
- 2) Satata (Double Quotidian) - Raktadhātu
- 3) Anyedhushka (Quotidian fever) Medovaha Srotas.
- 4) Tritiyaka (Tertian) Asthivaha Srotas.
- 5) Chaturthaka (Quartan) Majjavaha Srotas.

G. Jwara as per Seat of origin (Aasharya Bheda) (Eight types)

Vataj, Pittaj, Kaphaj, (mono Doshika) Vata Kaphaj, Vatapittaj Pitakaphaj (double Doshika)
Sannipataj (tri Doshika) Angantuja (external influences)

I. Sharirika (Daihika)**A) Doshika -**

- i. Prapaka (Inflammation)
- ii. Kashya (Diminution / Wasting)
- iii. Ajirana (Indigestion)
- iv. Visha (Poison)
- v. Asatmya (Uncongenial food / seasons)
- vi. Aushadhi (Allergens from drugs, flower (pollens),
- vii. Prasuti - Vikaras (Peurperial fever)
- viii. Stnya - (Engorgement of breast).

B) Sanghata Bala -

- i. Abhighata (Trauma)
- ii. Shurma (Physical Stress)

C) Daivabala -

- i. Abhishapa (Curse of elders)
- ii. Bhootabhishapa (Seizure by Graha Demons)
- iii. Nakshatra Peeda (Unfavourable constellations)

II. Mansika

a) Shoka

b) Mano-abhishapa (Psychological trauma)

Kashyapa Samhita⁵ has describe another classification of Jwara i.e. Samajwara and Aama Jwara as follows:

Samajwara (continuous fever) develops due to relative less causative factors, is external (apparent in skin and extremities), develops due to abnormalities, is free from complications, has one location, can be treated easily, and is light in digestion (subsidence).

No other author has described samjwara, probably due to the fact that except Vishama Jwara all others are Sama Jwara or continuous fevers. Fevers are classified in so many types, which include external and internal also; these are also said to have location in seven Dhatus and clinical features of fevers having location in Rasa etc. seven Dhatus are also described; the fevers located in Rakta, Mamsa and Medas are said to be curable. These fevers are called intermittent, because of appearance, duration and treatment being irregular. Constipation, anorexia, thirst, consciousness, bodyache, headache, delirium, lethargy, nausea, drowsiness, burning sensation, exertion, giddiness, polyuria, languor, undigested state of feces, disquietude of Doshas, heaviness of abdomen are said to be the features of fever.

Relatively longer list of features of this fever is given by Charaka which includes almost all the features mentioned by Kashyapa along with high fever, non excretion of Doshas excess salivation, stiffness and numbness of body-parts etc. Susruta says this fever is very high and there is constipation, subsequently included almost all the signs and symptoms given by Charaka. Almost similar features have been given by Vagbhatas^{9,10}. Considerable disappearance of these (features of fever due to Ama), attainment of mildness in the fever and lightness (of body) after eight nights should be indicated as fever without Ama. Besides the features given by Kashyapa, Charaka has added the movement or discharge of Dosas and minimum lapse of eight days of fever in the list .

Almost similar features are given by Susruta⁶, he has added that this fever is diagnosed considering the status of Doshas and Prakrti and abnormality . Vagbhatas^{9,10} say that fever opposite to Amajwara and lapse of seven days as the features of this fever . Charaka⁷ and Vagbhatas have described a stage of fever in between Ama and without Ama i.e. stage of Pacyamana (Doshas under the process of metabolism), the features of this condition are hyper-pyrexia, thirst, delirium, dyspnoea, giddiness, diarrhea and nausea etc.

Classification of Jwara:

On the basis of references available in Charka Samhita⁷, Sushruta Samhita⁶, Kashyapa Samhita⁵, Ashtang Sangraha⁹, Ashtang Hirdya¹⁰ and Madhava Nidana¹¹ brief classification can be as under:-

I. Nija - (Endogenous) Due to vitiation of Doshas, i.e. direct influences of dietetics and mode of life by consumption of Dosha specific dietetics, Nija (Dosha specific) Jwara ensue.

- a. Vata (Single Dosha vitiation)
- b. Pitta (Single Dosha vitiation)
- c. Kapha (Single Dosha vitiation)
- d. Vata and Pitta (Dual Dosha vitiation)
- e. Vata and Shaleshma (Dual Dosha vitiation)
- f. Shaleshma + Pitta (Dual Dosha vitiation)

II. Agantuja (Exogenous) Such Jwara, which has originated due to exogenous factors, initially, no involvement of any Dosha is present but later turns Doshika due to involvement of Dosha and Dhatus of body. The sign and symptoms are according to vitiation of particular Dosha.

- a) Vishjanya (Toxic)
- b) Aushadhi Gandh Janayas (Allergic)
- c) Kama (Sexual)
- d) Bhyadijanaya (Psychic).

Dhatugata Jwara:-

Another classification is based on the status of Doshas and their transgression to various seven Dhatus, thus, presenting symptoms as well as outcome of treatment shall be accordingly.

- I. Rasagata
- II. Raktagata
- III. Mamansagata
- IV. Medogata
- V. Asthigata
- VI. Majjagata
- VII. Shukragata

Certain Jwaras are named after as per their presence/ absence/ re-appearance hence, known accordingly:-

- a) Santata
- b) Satata
- c) Anyedyushaka
- d) Tritiyaka
- e) Chaturthaka

Kashyapa Samhita⁵, as available presently, is in fragmented form. Nidana Sthana is totally unavailable whereas description of Jwara is Sutrasthana is also not found. So, in Kashyapa Samhita⁵ two types of Jwara has been described in Sutrasthana as well as eight types are provided in Nidan Sthana .

So, classification of Jwara by Kashyap Sanhita can be made on the basis of their description of Jwara in various available chapters. The description available in Sutra Sthan explains prodromal feature of Jwara, under Vedna-adhyaya i.e the child repeatedly flexes body parts,

yawns, coughs frequently before onset of fever, clings to wet nurse and averges breast feeding, salivation is excessive, body temperature is raised, forehead of infant is excessively hot. The infant show anorexia and has cold feet.

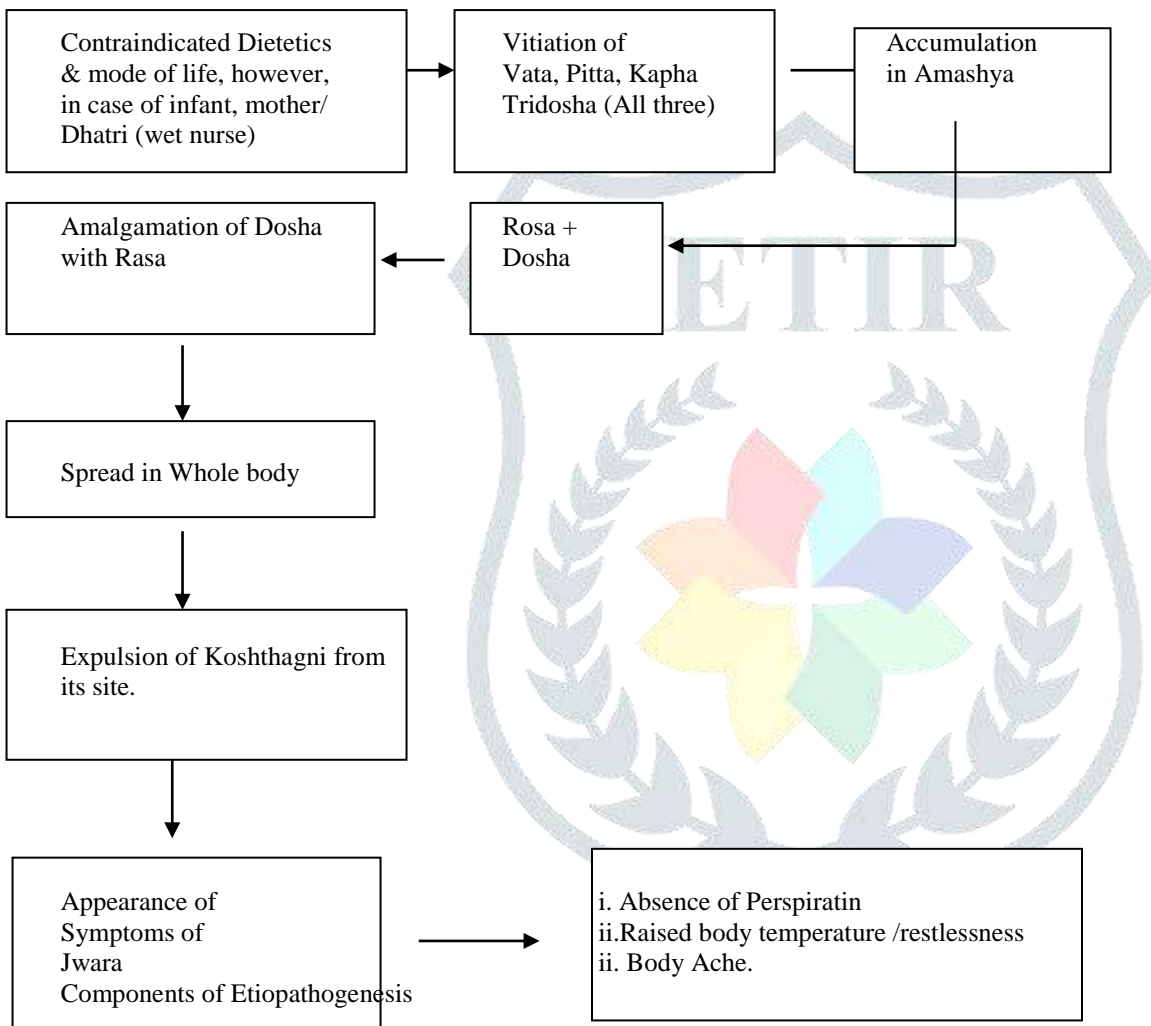
Under the chapter of diseases (Rogaadhyaya) while discussing classification of diseases, a debate has been presented and it concludes with remark of Vridha Jeevaka . Diseases are only of two types.

- i. Endogenous
- ii. Exogenous

The same can be further extended innumerably on the basis of Hetu (etiology), Prakriti (nature of diseases), Adhistan, Viklpa (options) and Ayatana (Specification of treatment). Further, on the basis of Adhistan (involved site / area) these can be classified into two :

- i. Sharirika (Somatic)
- ii. Mansika (Psychological)

Etiopathogenesis of Jwara



- Dosha = Single / Two / All Combined
- Dushya = Rasa, Koshtagni
- Adhishthana = Amashya whole body
- Srotas = Rasavah's

Prodromal Symptoms of Jwara:

The symptoms are usually of two types.

- a. General
- b. Specific

General prodromal features:

- i. Shrama (Fatigue)
- ii. Arati / Anavasthita Chittatva (Uneasiness)
- iii. Vivarnata / Mlana Gatra (Change in complexion)
- iv. Vairsya (Distaste)

- v. Sheeta - Vata - Alapa Ichha /Dweshha (Intolerance to climate variation)
- vi. Nayanaplva (Ashru Purna Netrata) (Watering eye)
- vii. Jrimbha (Yawning)
- viii. Angamarda (Bodyache)
- ix. Guruta (Heavyness of body)
- x. Romaharsha (Horripilation)
- xi. Aruchi (Anorexia)
- xii. Tamahpravesh (Drowsiness)
- xiii. Apraharsha (Aversion to sex)
- xiv. Sheeta (Chill)

Specific Prodromal Features:

- i. Yawning (Jrimbha) in Vata Jwara)
- ii. Burning Sensation in eyes (Nayanadaha)in Pitta Jwara)
- iii. Anorexia (Aruchi) in Kaphaja Jwara)
- iv. Mixed symptoms in combination of two Doshas.
- v. Amalgamated symptoms in Sannipata fever.

Signs Symptoms of Jwara:

General Symptoms of Jwara

Charka (Chi 3/26)	Samhita	Sushruta (Utt. 39/3)	Samhita	Madhava Nidana (2nd Chapter)
i. Santapa (Raised body temp)		i. Swedavrodha (Confinement of perspiration)		As mentioned in Sushruta Samhita.
Aruchi (Anorexia)		ii. Santapa (Increased body temp)		
iii. Trishna (Thirst)		Sarvanga	Grahana	
iv. Angamarda (Malaise)		(Seized body or body ache)		
v. Hridya-vyatha (Discomfort in cardial region)				

Charka has mentioned five main features of Jwara:-

1. Santapa - (Raised body temperature)
2. Aruchi (Anorexia)
3. Trishna (Thirst)
4. Angamarda (Maliase / Uneasiness / body ache)
5. Hridya-vyatha (Discomfort in cardiac region)

However, Sushruta has considered group of symptoms of Jwara. Only raised temperature can not be treated as Jwara because Santapa can be the symptom of any other individual diseases. So, Sushruta has added a clause, Yugapad i.e. together as a group, for designating Jwara as a disease entity. Even in the beginning of the chapter of "Jwara Pratishedha" (Prevention of fever) the chapter starts with reference of complications of wound (Vranas) and of wounded person. It can be infered that Sushruta, being surgeon, has described Jwara in terms of wounded person as a complication thereof. It is interesting to note that where all the Acharyas have described the Jwara in the beginning of all diseases but Sushruta described it in Uttara Tantra. Although, Sushruta has dealt all aspects of Jwara but comparatively in brief, however reference of fever caused by trauma (Abighata Jwara) is common. Madhava Nidan has almost literally followed mainly Sushruta Samhita but other aspects, not dealt by Sushruta Samhita have been derived from Charka Samhita.

Vata Jwara	Pitta Jwara	Kapha Jwara	Vata + Pitta	Vata + Kapha	Pitta+ Kapha
- Dryness of throat	Hypepyrexia,	Mild fever	Thirst,	Pain in small joints.	Bitter taste,
- Loss of Sleep	Loose motion,	Lethargy,	Burning, sensation,	Excessive sleep	Drawsi-ness,
- Headache	Disturbed sleep.	Sweet taste, Anorexia	Headache,	Heaviness,	Anorexia,
Cardiac Pain	Vomiting,	Excessive sleep,	Yawning,	Coryza,	Thirst
Bodyache	Bilimus vomiting.	Heaviness of	Pain in small joints,	Cough,	Cough
Dryness of mouth					Intermittant
- Distaste					
- Tympanitis					
- Yawning,					

- Constipation or Hardstool.	Perspiration, Delirium Bittertaste Fainting Attacks. Thirst Yellow Urine, Stool, Eyes, Vertigo, Burning sensation, Stomatitis, Rhinitis	body, Stiffness, Excessive salivation, Rhinitis Cough, Vomiting, Indigestion Pallor, Urine Stool, white/muddy, Drowsiness	Distaste, Insomnia, Fainting, Vertigo, Inflammation of throat, Horripilation	Excessive, Perspiration, Moderate Fever, Rigidity Headache.	feelings of Hot/ Cold, Unctuousness in body
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Signs and symptoms mentioned under Jwara in above table also exhibit certain dissimilarities as well as strange permutations of other symptoms for example horripilation and anorexia both neither belong to Vata nor Pitta. Similarly under Vata Kaphaja Jwara excessive sweating and burning sensation; in Pitta-Kaphaj Jwara alternate / cold and hot feeling. These are not in accordance with their Doshika involvement. Charaka has designated these under "Vikriti Visham Samavaya" just like mixing of termaric with lime produces red colour. Whereas symptoms of individual Doshika involvement has been called as "Prakriti-Sama-Samavayarbha".

Vishama Jwara:

Under the circumstance when status of the vitiated Dosha/ Doshas is low or else remanats of earlier fever are present; consumption of no congenial diet or mode of life, such Doshas/ Doshas are vitiated and reach rasa etc. any Dhatu and produce fever having irregular type of presentation. Various Acharyas have put their opinion about Vishama Jwara but description of Vagabhat⁹ seems to be more agreeable i.e. the fever in which:

- Onset (Arambha)
- Course (Kriya)
- Duration (Kaala)

are irregular, should be considered as Vishama Jwara.

As per Sushruta⁶ in Vishama Jwara, patient behaves as if not having fever but it stays for longer period like garavisha in Dhatu.

Classification of Vishama Jwara based on seat and course.

S.No.	Type	Seat	Course	Pattern	Line of Treatment
1-	Santata	Rasa Dhatu	Vataja 7 days Pittaja 10 days Kaphaj 12 days	Remittant or Continuous fever 7-10-12 days.	Emersis Fasting.
2	Satata	Rakta Dhatu	Two peaks in 24 hours	Double Quotidian	Pacifying drugs.
3	Anyedhyushka	Mamsa Dhatu	One Peak in 24 hours	Quotidian	Purgation Fasting.
4	Tritiyaka	Meda Dhatu	Every third day	Tetrian	Purgation Feting.
5	Chaturthaka	Asthi & majja	Every 4th day	Quartan	Basti (Niruha Anuvasan)

As per Charaka⁷, in remittent fever Doshas spread all over the body through the Rasa carrying channel Rasa and having been stiffened there produce Santata Jwara (remittent fever), however, being unbearable and quick acting either it gets subsided or kills the patient with in period of seven, ten or twelve days; as per the status of Dosha, Dushya and constitution and due to absence of having no counter-acting factor, cause the fever, thus, is unbearable; as a rule Vata etc. Doshas, influence urine and feces alongwith Doshas. When Doshas and Dhatus are not purified completely, the remittent fever gets lodged in seven Dhatus, three Doshas and urine and feces etc. twelve sites and remains hidden for a long time. Susruta has also accepted that remittent fever is a continuous type of fever remaining for seven, ten or twelve days. Vagbhatas say that these intermittent fevers are due to vitiation of all the three Doshas; these authors have also corroborated the views given by Charaka, citing the opinion of Harita, says that the fever may subside after fourteen, eighteen and twenty days in predominance of Vata, Pitta and Kapha Dosha respectively.

According to Vagbhatas⁹, Santata and Santata fevers change into each other; because the Rasa carrying channels are nearer, and their orifices are open, the Doshas spread in the body quickly, thus, the Santata fever changes into Santata fever; if the conditions are apposite then, contrary happens i.e. Santata fever changes into Santata .

The seat of Anyedyushka (quotidian fever) is chest. The Doshas having fallen down from chest in one day and night, reach Rasa, when show their strength, then during its own period following necessary consequence, the Anyedyushka (quotidian) fever develops. As per Charaka, Doshas getting support from one of the factors such as time, constitution and Dushya, obstruct the channels carrying Medas, in present of counteracting factors: fever rises once in twenty four hours; other opine that quotidian fever is caused when Doshas are lodged in Rakta, it appears daily as paroxysm of Doshas, is daily . Other authors have also accepted that this fever rises once in twenty four hours; Vagbhatas accepting its rise a day say that its location is in the Nadis (channels) carrying Mamsa .

Charaka⁷ opines that Doshas getting support of one of the factors, i.e. time, constitution and Dushya obstruct the vessels carrying Medas in presence of counteracting factors. Thus, fever rises once in twenty four hours; the Doshas lodged in bone and marrow cause tertian and quartan fevers respectively. The paroxysm of Doshas is at the interval of two days or one day or daily; however others say that the quotidian, tertian and quartan fevers are caused when the Doshas are lodged in Rakta, Mamsa and Medas respectively. These all intermittent fevers are generally due to combination of all the three Doshas and rises in particular time due to strength or otherwise of seasons, day and night, Doshas and deeds . Sushruta says that majority of these intermittent fevers are due to influence of Bhutas or nature. Very often, influence of exogenous factors, is definitely there. These fevers are also said to have influence of two Doshas and have association of unconsciousness, these appear irregularly during the six periods of day and night of aggravation of Doshas. These never leave the body of human being, because languor, heaviness and emaciation persist, though after remission it appears to be cured, but in fact it gets lodged in the deeper tissues of the body and reappears in opportune time. The Doshas after remission of any fever get aggravated due to abnormal mode of life and dietetic, thus, getting lodged in Rasa or Rakta etc. Dhatus produce Visham fevers.

Mamsa, Medas and Marrow produce Santata (remittent), Anyedyushka (quotidian) tertian and quartan fever respectively; the Vata aggravated due to abnormal dietetics and abnormal mode of life excites one or two Doshas, which produce intermittent fever. The fever rises during the physiological period of predominance of that particular Doshas due to being excited by Vayu; the peak (paroxysm) of fever subsides after subsidence of this excitation stage . Vagbhatas say that the Doshas are not properly eradicated due to minute nature of Srotas and lodging of Doshas in far-away Dhatus. The Doshas moving with slow speed, reach next Dhatus with further lower speed and get hidden in the respective place, then get aggravated with respective causes and produce fevers .

The location of Triyaka (Tertian) is throat. The Doshas having fallen down from here in one day-night reach chest in next day and night, consequently getting located in Rasa Dhatus and mixed with heat, get completion of cycle on third day and produce Tritiyaka (tertian) fever. Charaka says that Doshas after reaching bones produce tertian fever; having movement of Doshas and after one day i.e. the fever appears on alternate days; citing opinion of others, says that, when the Doshas reach channels carrying Mamsa, this tertian fever appears; this is said to have predominance of two Doshas each having different clinical features i.e. presence of initial pain in sacral region, backache and headache, in fevers due to Kapha with Pitta, Vata and Kapha and Vata with Pitta respectively, this is followed by bodyache , Vagbhatas have also accepted the view of Charaka, however, say that in Visham Jwara here Doshas are located in channels carrying Medas . Susruta also says that this fever rises on alternate day.

Seat of Chaturthaka (quartan) is head. From their seat (the head), the Doshas getting fallen down in one day and night stay in throat; then again on next day-night reach chest, on third day-night get aggravated in Rasa Dhatus. Chaturthaka (quartan) being seated in deep location and vitiated by mixture of Dhatus, after showing its strength in time, get concealed in head. Having developed due to combination of all the three Doshas and also due to contract of Dhatus, is very difficult to treat, so it should be treated accordingly.

In quartan fever, the movement of Doshas is after two days, thus, the fever appear after interval of two days when the Doshas reach Marrow; according to opinion of others, the Doshas get lodged in the channels carrying Medas; the fever appears after rest of two days in two ways i.e. when it has predominance of Kapha there is pain in thighs and when has predominance of Vata there is headache; other fever, named, as Chaturthaka-Viparyaya (reverse quartan) is also described; when three dosas separately get situated in two Dhatus i.e. Asthi and Majja, the other type of intermittent i.e. reverse quartan fever appears . Vagbhatas say that in quartan fever the Doshas get lodged in either Medas, Majja or Asthi, though others opine that the Doshas are lodged only in Majja; it affects in two ways i.e. it starts from thighs or head, in predominance of Kapha or Vayu respectively; it is difficult to cure, because, it is caused by all the three Doshas, having identical aggravation and moving in deeper Dhatus; reverse quartan appears when Doshas i.e. either Vata or Pitta or Kapha (three type) reach in Asthi

and Majja; this fever persists for two days and recurs after remission of one day . Susruta has also accepted that this fever appears after interval of two day .

Sannipatika Jwara (compound of Vata, Pitta and Kapha).

Various signs and symptoms as well as different commutations and permutations of all the three Doshas have been mentioned by various ancient Ayurvedic scholars. However two types of combinations have been described.

i. Sama- tridoshaya Sannipata.

ii. Visham - tridoshaj Sannipata.

Common symptoms under Sama-Tridoshaja have been mentioned whereas in Visham Tridoshaj Sannipata these have been classified as per status of vitiation of Doshas in particular types of Sannipatti in a Jwara.

i. Sama - Tridoshas Jwara:

1. Alternating hot and cold.
2. Body ache and Headache.
3. Druping of eyes with excessive lacrimation with reddish eyes.
4. Tinitus and Earache.
5. Extensive sore throat with feeling as if thorns in throat.
6. Fainting attacks, vertigo and delirium.
7. Cough, dyspnoea
8. Anorexia and thirst.
9. Coated/furred tongue with burnt like sensation.
10. Flaccidity.
11. Hematemesis / hemeptysis.
12. Restlessness.
13. Irresistible thirst.
14. Insomnia
15. Chest compression / Dull pain in pericardial area.
16. Scanty and delayed defecation, mictureation.
17. Comparatic less emaciation.
18. Wheezing / Cooing.
19. Bluish / Red rashes over skin.
20. Unable to speak (Aphasia/ Aponia)
21. Inflammation of external orifices of body i.e. mouth, ears, anal canal etc.
22. Tympanitis / Dullness in abdomen.
23. Delayed Doshika resolution.

ii. Vishama Tridoshaja Sannipata:

Charka Samhita⁷ has mentioned 12 types of Sannipataja Jwara. Due to dominance of particular Doshas / Doshas (Ulbanda) other Acharyas have mentioned 13 types also Madhavkara¹¹ has mentioned 12 and categorized them according to medium levels of Doshas. However, vitiation can not be demarkated or kept under certain limits, hence, Vikriti-Vishama Samvaya can be unlimited. Due to this reason Sushruta has mentioned Abhinyasa fever Charka has described following classification Samipitaj Jwara.

- i. Vatapittalbana and Heen Kapha
- ii. Vatakapholbana and Heen Pitta.
- iii. Pittakapholbana and Heen Vata.
- iv. Vatadhika Heenpittal Heen Kapha
- v. Pittadhika Heen Vata Kapha
- vi. Kaphadhika heen vatapitta.
- vii. Heen Vata Madhyama Pitta Shleshmadhika.
- viii. Heen Vata Madhyama Kapha Pittadhika.
- ix. Heen Pitta Madhyam Kapha Vatadhika
- x. Heen Pitta, Madhyama Vata, Kaphadhika.
- xi. Heen Kapha, Madhyama Vata, Pittadhika.
- xii. Heen Kapha, Madhyama Pitta, Vatadhika.

Bhaluki Tantra⁷ has classified Sannipata differently and named every type specifically as under:

- i. Vatolbana - Visphurana.
- ii. Pittolbana - Ashukari
- iii. Kapholbana - Kamphana
- iv. Vatapittolbana - Vibhu
- v. Pittal Sleshmolbanna-Phalgu
- vi. Vata Sleshmolbana - Makri
- vii. Heen Vata, Madhyapitta, Kapholban - Vaidarikarna
- viii. Madhya Vata, Madhya Pitta, Heen Pitta - Yamyaka .
- ix. Madhya Vata, Adhik Pitta, Heen Kapha - Karcakcha .
- x. Adhika Vita, Heen Pitta, Madhyakapha-Pakala
- xi. Pravridha Tridosha - Kuta Kapala .

All the classifications, mentioned above are based on Anashamsha Kapha (Commutation and Permutations). Some critics-say how these opposing doshas come together and produce Sannipattika situations because according to Vaisheshikas similar one result in increase where opposite result in regression. Charka dutta has supported this conjugation on the basis of natural (Sahaja) and congenial (Satmya) situation of Doshas bring these opposing together. Some Acharyas say this explanation is just like a Hetvabhasa (vertual). However, has tried to justify the Sannipatika status on the basis of "Anupaghata" Commentator Gayadasa has stressed upon "Svabhava" and "Daiva: which is natural amity under extraordinary situation as following.

Prognosis in Sannipata Jwara:

Under following circumstances Sannipata Jwara is considered incurable, although usually difficult to cure but is never easily curable. As per Charka Samhita⁷ (Sutra 25) Sannipata is always tough to cure whereas Bhaluki Tantra considers Sannipata Jwara like facing the death due to following reasons.

- Absence of Jatharagni
- Absence of progression of Malas and Doshas.
- Symptoms are present in fullest form.
- Extreme manifestation of disease.

Exogenous Jwara⁷ (Agantuja):

Such fever is caused primarily due to external influences and not present with Doshika symptoms in early stage.

1. Traumatic (Abhigataja): Due to infliction of blunt/ sharp instruments there may be bleeding or excessive pain is present along with fever.
2. Black Magic (Abhichara) : For the purpose of creating high level pain, uneasiness along with fever certain type of hymns are practised. by the experts.
3. Curse (Abhishapa): Due to showing disrespect to holy persons, saintly people, elderly persons, many types of undesirable physical and psychological ailments associated with high fever can appear suddenly. The intensity of these depends on gravity and status of the person who is cursing.
4. Psychogenic (Abhishangaja) : Due to indulgence in Kama, Krodha, Shoka, Bhaya etc. psychological factors or by affliction by Grahah, this type of fever appears.
5. Toxic fever (Vishajanya) are caused due to ingestion of poison by chance/ deliberate consumption or got ingested by mixing in food material. Common symptoms are cynosis, diarrhoea, thirst, anorexia, pricking pain, coma etc. along with fever.
6. Drug induced/ Allergic fever (Aushadhagandhaja) is associated with fainting, headache, vomiting, sneezing etc. which can be compared with hay fever or allergic fever.
7. Cupid fever (Kama fever) usually presents with depression, fainting, delirium, excessive thirst, insomnia, chest pain, drowsiness, progressive weakness and weight loss etc.

Shokaja and Bhyaja Jwara is commonly associated with loss of appetite, excessive sleep, delerium along with high grade fever. Krodhaj Jwara is associated with tremers and in Bhutabhi-shangaja is accompanied with bizzare behaviour alongwth sudden laughing or weeping and tremers.

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