



Review Article

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CRITICAL ANALYSIS OF ARISTA VIJNANA

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ABSTRACT

The subjective parameters of disease diagnosis and assessment are best told in our ancient text and seem eternal in anytime. Though they didn't have much objective aids then, they had very accurate sense to observe, to assess and to give proper prognosis. Amongst them AristaVijyana (Fatal science) is very unique and sometimes beyond normal perception. The article throws light on various aspects of understanding Arista a probable critical analysis, the rationality and probable understanding in present era as per allied sciences. For understanding Arista (fatal signs) and perceiving Arista in a patient the physician should have complete theoretical knowledge, sharp senses, quicker thinking and vast experience. It includes all varieties of Pareeksha (examination), Prathyaksha (sensual perception), Yukti (logic), Anumana (inference) and every Pramanas (various methods to attain knowledge).

Keywords: Arista, Marana, Indriyasthana

INTRODUCTION

Arista Lakshana (fatal signs) are those signs and symptoms which herald the oncoming death just as flowers indicate the next oncoming fruit, the smoke indicate fire and cloud indicate rain¹. There is no death without Arista and there will be no life after their appearance. Hence physician should acquire a thorough knowledge of Arista. According to Astanga Hrudaya, the Chikitsa depends on Ayu (life) hence if there is increased Ayu there will be good Phala (result). If person is not having Ayu the Arista will be Vyakta (definite). And if such a person is treated there will be Nashta (failure) to Vaidya (physician) for Dhana (prosperity), Yashas (fame) and people doubts the Shastra Jnana (knowledge of science) of Vaidya. Hence Ayurveda Sampurna Phala (complete result) is obtained by having proper AyuJnana (knowledge of life). The Mana (measurement) of his Ayu depends on Prakruthi (natural constitution) and Vikruthi (deviation from natural constitution). As Sarva Padartha (all the objects) in this universe are Nashwara (undergoing destruction), Vinasha Kriya (destructive procedure) always happens and Marana (death) is Swabhavika Kriya (normalcy) and hence Vaidya should be aware of Marana Kala (time of death).

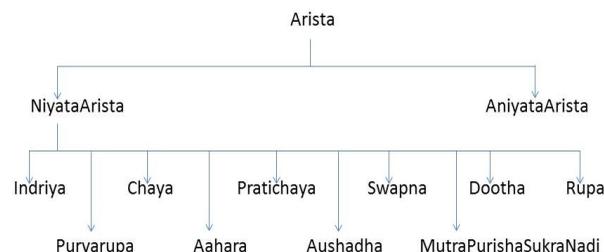
Definition

*Shareera Sheelayoryasya Prakurtervikruthir Bhaved
Tatvarishtha Samasena Yasathasthu Nibodhame²
Su.Su.30/3*

Abnormal changes happening in the body, temperament and constitution are in brief called as Arishta

*Kriyapadham Athikranthaa Kevalam Dehamaplutha
Chinnam Kurvanthi Yadosha Thadarishtam Niruchyathe³
Ca.I.11/28*

Dangerous and ominous symptoms suggesting definite death of a patient is Arista



Arista Suchaka Indriya Jnana Sparshanendriya (Touch perception)

This is an important Indriya (sense organ) by which Indriya Jnana (sense of perception) and Viparyaya Jnana (opposite perception) is attained. For proper information Vaidya should palpate the whole body of the patient. On palpation when the parts having Spandana (pulsation) turns Aspandana (without pulsation), Mrudu (soft) turns Katina (hard), Ruksha (rough) turns Snigdha (oily), Ushna (hot) turns Sheetha (cold) and vice versa is Arista⁴. If there is Sampurna Sheeta Shareera along with Daha (burning sensation) and Sheeta Shareera (cold body)

along with Ushna dwesha (aversion towards hot) the Sparsha Jnana Arista is present. In a person with Akasmika Upaghata or Pakshaghata (cerebrovascular accident) if Ushna Pradesha (hot body) becomes Sheetha (cold) with Sweda Adhikya (increased sweating) is Arista. A person with Pakshaghata having Hrudaya Stambha (myocardial infarction) and his Spanditha Pradesha (pulsating area) becomes Aspandita (non- pulsating) is Arista. Soft abdomen becomes hard in peritonitis and loss of peripheral pulsation is seen in gangrene of extremities are signs of fatality.

Rasanendriya (Taste perception)

The taste perception can be of two types, self-perception by patient and others can perceive. The Arista includes absence of Swabhavika Jnana of Rasanendriya and Viparyaya Jnana. In certain Mukhapaaka (inflammation of oral cavity) conditions there can be Viparyaya Jnana. In Sarpa Visha (snake bite) when the person is not able to perceive Katu Aahara (spicy food) then there is loss of Swabhavika Jnana. The Arista of Rasanendriya that others can perceive includes Shothayukta (swelling), Shushka (dry), Sakantaka (with projection), Syava Varnatha (blackish discolouration), Supthata (numbness), Malavrutha (unhygienic) of Jihwa (seen in Gambheera Roga Avasta of Annavaha Srotas). The Makshika (honey bee) and Yuka (insects) going away from the body is Arista⁵. The blackish discolouration seen in lead poisoning and the bluish discolouration seen in central cyanosis of serious systemic illness can be the signs of fatality. Any problem to glossopharyngeal nerve can cause opposite taste perception.

Ghranendriya (Smell perception)

The smell perception also can be of two types as mentioned previously. Smell of the body turning into (Sugandha) (fragrance), Durgandha (bad odour) or Gandharahitha Avasta (without odour). Sugandha includes smell of different flowers coming out of body. Sugandha comes out even without Snana (bath) and Durgandha even after Snana are Arista⁶. Madhugandha (smell of honey) coming out from a person having Deerghakaaleena Madhumeha (chronic diabetes mellitus). Athyadhika Durgandha (severe bad odour) observed in conditions like emphysema, lung abscess, gangrene, uraemia, intestinal obstruction and fruity odour in diabetic ketoacidosis are fatal. Due to damage of olfactory nerve there can be anosmia and hyposmia.

Darshanendriya (Visual perception)

The visual perception can be of two types, person himself able to perceive and others can perceive. Person able to see Adrishya Vasthu (object which is not present) and unable to see Drishyavasthu (object which is present) is Arista. And Viparyaya Jnana that is seeing small thing as big one and vice versa is Arista. Watching stars and moon at day time, clouds and thunder in clear sky and seeing super naturals like Pretha (ghost), Rakshasa (demons), unable to see Arundhati Nakshatra (auspicious star) are

fatal signs⁷. Continuous movement / absence of movement of eyeball can be identified by others. Visual hallucination occurs due to damage in visual pathway and also due to thrombosis and disease that affect the temporal lobe.

Srothrendriya (Auditory perception)

The auditory perception can be of two types, including absence of Swabhavika Jnana and attaining Viparyaya Jnana. Hearing Shabda (sound) in Shabda Abhava (absence of sound) and vice versa like Nadi Pravahana Shabda (sound of pulsation) and Samudra Garjana (sound of ocean) in its absence and hearing Shathru Shabda (sound of enemy) in Harsha (happiness) are Arista. Auditory hallucination occurs due any damage in vestibule cochlear nerve and tumour in brain.

Arista in Mutra, Pureesha and Shukra Pareeksha

On the basis of density, if Mutra (urine), Pureesha (stool) and Shukra (semen) sinks in water it is Arista Lakshana⁸. In Mutra Pareeksha – When Taila Bindu Pareeksha (examination done on urine using sesame oil drop) is done if the Taila Bindu (oil drop) moves in Utharapoorva (north-east) /agneya (south-east) direction it is Arista. If Taila Bindu appears Chidritha (porous) Marana is Nishchaya (without doubt). If Taila Bindu moves in Vayavya (north-west) direction the person won't survive even after giving Amrutha (life saving drug). Appearance of Shiroheena Manava Chaya (person without head), Tortoise, buffalo, honey bee and Shastra (instrument) Marana is sure.

Mala Pareeksha – If the mala appears Athi Krishna (black), AthiShubhra (white), Athipeetha (yellow), Aruna (red) and Ushna (hot) Mrythu is sure⁹.

Arista in Nadi Shastra (pulse examination)

Nadi (pulse) which is highly vibrating and pulsating like that of lightening is considered as Arista. Nadi which is more rapid and sometimes very thin and runs extremely weak/ fast/ cold are Arista. Nadi which is not felt in any other part of body but felt in leg and mouth remains open is Arista. The person, who's Nadi creates Deha Shaithyatha (weakness of body) along with Swasa (dyspnoea) and Daha (burning sensation) die within 15 days. Nadi which is Teevra (very fast) and Manda (very slow) along with Sweda (sweat) die within 7 days, Nadi in Mukha (oral cavity) disappears along with Shaithya (coldness) and Klama (fatigue) dies within 3 days. Nadi not felt at proximal end, cold in middle and appears tired at terminal end dies within 3 days. Nadi which is very feeble and cold and felt like cloth wave dies within One Yama (three hours)¹⁰.

Roopa Arista (Fatal symptoms)

The following Roopas (symptoms) coming together is considered as Arista. Gambheera Hikka (severe hiccup) along with Rakta Atisara (bloody diarrhoea), Anaha (distension of abdomen) with Athisara (diarrhoea) are

Arista. A person having Bala Mamsa Kshaya (decrease in strength) having Jwara (fever) along with ShuskaKasa (dry cough) is fatal. The Shotha which is spreading from Udara (abdomen) to extremities is fatal. A person with Raktapitta (bleeding disorder) having Laksha Raktambarabha (reddish discolouration) and Rajayakshma with Balamamsa Kshaya and Prathishyaya Vardhatha (severe running nose) are Arista¹¹.

Vrana (wound) Arista

The Arista Suchaka Vrana told by Sushruta is as follows Sthananusara (according to site) – Vrana in Marma Pradesha (vital points)

Kaalanusara (according to chronicity) – Vrana affecting Saptha Dhathus (seven body tissues)

Sravanusara (according to type of discharge) – Navaneethathulya Srava (discharge like that of butter) from Vrana

Gandhanusara (according to odour)–Vrana having Shushka Mamsa Gandha (smell of dried meat) and Teevra Gandha (penetrating odour)

Roganusara (according to associated disease) –Vrana seen in Dushi Visha (toxicity) and Rajayakshma (wasting disorder)

Varnanusara (according to colour)– Vrana having Krishna Varna (black colour)

Upadravanusara (according to complication) – Vrana associated with Swasa Krucchratha (difficulty in breathing), Kasa (cough) and Aruchi (anorexia)¹²

Ahara (diet) and Aushadha (medicine) Arista

If Vaidya himself advises the Ahara (diet) for the Rogi (patient) based on Dosha (humours) and Vyadhianusara (according to disease), but after following the diet there is no Labha (benefit) or there is no change in Vyadhi Avastha (stage of disease) is Arista. If there is Asulabhatha (scarcity) of Dravya (raw materials) which was Sulabha (easily available), one tries to prepare Aushadha (medicine) with great difficulty and it becomes unsuccessful is considered as Arista. The vessel which is used for preparing Aushadha gets destroyed or not available at the time of preparation is Arista Suchaka. The Vaidya due to his lack of time or forgets and not able to prepare the Aushadha and when once prepared gets spoiled due to no reason is Arista. Once medicine is prepared in Ucchitha Reethi (high potency) and already its Phala (result) is proved in other patients but when the same is given to the particular Rogi it becomes Nishphala (no result) can be considered as Arista.

Chaya and Prabha Arista

Chaya and Prabha determine Saubhagya and Daurbhagya, Sukha and Dukha of a person. Chaya depends on colour of the skin and Aabha (complexion) of a person which can be viewed from near. Chaya is based on Panchamahabhoothas (five humours of earth) and among them Vayavya (air) Chaya which is Ruksha (rough), Shyava (black), Aruna (red), Prabhaheena (without lustre) and is most Vikrutha (diseased) and Ashubha

(inauspicious). The Prakrutha (normal) Chayasare Gaura (white), Agaura (other than white) and Syama (blackish). The Tamra (coppery) and Harita (greenish) Chaya are Viparitha (opposite) and when Swastha (healthy) persons gets Viparitha Chayathere will be Mrithyu¹³.

Prabha means lustre which can be viewed from distance and having Agneya Guna (quality of fire). Prabha is of seven Rakta (reddish), Peetha (yellowish), Pandu (pale), Syama (blackish), Haritha (greenish). Prabha which are Snigdha and Nirmala (clear) are Prakrutha (normal) which is Shubha Soochaka (auspicious) whereas Ruksha and Anirmala (unclear) are Vikrutha and Ashubha Soochaka (inauspicious). Prathichaya is shadow and Prathibimba is image which is seen in mirror or water and any disfigurement in these two is Arista.

Swapna (dream) Arista

Swapna is of two types mainly Shubha Swapna (auspicious dream) and Daruna Swapna (inauspicious). The result of Swapna will vary according to different Yamas (hour). Swapna plays an important role in telling the Bhavi (future) of a person. Shubha Swapna includes dreaming objects like elephant, horse, cow, fish, Devatha (lords), Brahmana (Brahmins), Purvikas (ancestors), Savisha Prani (poisonous insects), Swetha Vastra (white cloth), Swetha Pushpa (white flower) and Nirmala Jalashaya (clear water bodies). Dreaming objects like curd, fruit, beetle leaf, lotus and shell make the person rich. Ashubha Swapna includes dreaming objects like ghost, demons, anthill, burial ground, long hair / nail and hermit. It also includes watching person indulges in Chaturvidha Sneha (four types of oily substances), doing emesis, person getting Swarna (gold) or any other metals, bandaging, consuming alcohol with ghosts, sinking in fresh water river, colour of person changes while bathing, hugging ghost or hermit, by wearing red dress and moving towards south with loud noises and seeing marriage¹⁴.

Dhootha Arista

When Dootha (person coming with the news of diseased) comes, physician indulging in following things are considered as Arista. Physician is sleeping, performing Agnihotra (ritual), Pitruja Pinda Daha (ritual), saying abuse words, hearing the death news, accompanying dead bodies and cutting something is Arista. The following appearance of Dhoota is considered as Arista like person with fear, dirty dress and Dhoota accompanying sterile person, lady and many people is Arista Lakshana.

While Vaidya travelling to patients house the following omens coming on the way are considered as Arista like snake, dog, and cat, ash fell over the body, sound of loud cry, falling, hearing abuse words and seeing ferocious animals.

The following things in patients home is considered as Arista like Brahmana comes out of house, loss of jewels and gold, broken vessels, seeing vessels full of fire, extinguishing fire.

Table 1: Arista Soochaka Nidanas

Ajeerna (indigestion)	Ksheena (weak), Sthira (stable)
Athisara, Grahani (IBS)	Manda (slow), Sthira
Apasmara (epilepsy)	Ksheena, Manda
Amlapitta (GERD)	Ksheena, Chanchala (not stable)
Amavata (rheumatoid arthritis)	Sukshma (minute), Manda, Ksheena
Raktapitta (bleeding disorder)	Chanchala, ksheena
Vataroga	Nanaprakara Gati (various movements)
Hikka	Chanchala, Thanthumat (thread)

Table 2: Purva Rupa Arista in various diseases

Gulma (tumour)	Antrakoojana (gurgling sound), Atyadhika Durbalatha (increased weakness), Koshta Badhatha (intestinal obstruction)
Kushta (skin disease)	Trushna (excessive thirst), Vrana (wound), Vrukkaroga (kidney disorder), Phupphusaroga (lung disorder)
Rajayakshma	Kramashabalakshaya (reducing strength), increased Prathishyaya (running nose), Stree Prasanga (over indulgence in sex)
Unmada	Dhyana Avasta (meditating state), Shramayukta (fatigue), Moha (confusion)
Apasmara	Andhakara (darkness) seen without Andhakara, Shabda heard in absence of Shabda
Arbuda (metastasis)	Shoola (pain), Daurbalya (weakness), Vaivarnyatha of Nakha (discolouration of nails)

Table 3: Daruna Swapna in various diseases

Jwara	friendship with dog
Gulma	Vruksha Utpathi
Prameha, Atisara	Jalapana
Kushta	Snehapana
Rajayakshma	Friendship with monkey
Unmada	Friendship with Rakshasa
Apasmara	Friendship with Pretha
Swasa Roga (dyspnoea)	Journey
Pandu Roga (anemia)	Haridra Mishritha Anna

Table 4: Kaalanusara Swapna Phala

Pradhama Prahara (first three hours)	Swapna phala within 1 year
Dwithiya Prahara (second 3 hours)	Swapna Phala 6 to 8 months
Trithiya Prahara (third three hours)	Swapna Phala within 3 months
After that	Sadhya Phala

DISCUSSION

Pareeksha Bhavas (state of person)

The Pareeksha Bhavas that are to be observed while examining for Arista Lakshanas are Panchendriya Pareeksha which has the prime importance. Then note the states of Satwa, devotion, hygiene, habits, cultures, memory, shape, strength, fatigue and happiness. Look for the Gunas (qualities) like Rukshata/ Snehata, Gurutha/ Laghutha. Then look for any change in Aahara and Vihara and stages of digestion. While looking Vyadhi (disease), Vyadhi Purvarupa (prodromal symptoms), Vedana (pain), Upadrava Gata Vaishishtyam (complications) and in Chaya note for Prathichayagata Visheshatha (change in normal Chaya) are to be noted. The other points to be noted in Arista Vijyana are Swapna Darshana, Shubha Ashubha Doota Marga Sambandhi, Sakuna and Apasakuna (good and bad omens), Rogi Graha Avasta (state of patients home), Aushadhi Avasta and Anavasta, Aushadhi Prapti and Aprapti and Deergha Darshana (seeing the future).

Sadhyomarana Lakshanas

The main Lakshanas observed in Sadyo Marana (immediate death) are Daha and Hikka coming as Upadrava, urine retention, change in eyebrow from its

normal position, decrease in blood and muscles, distension of abdomen and Urdhwagathi (upward movement) of Vayu¹⁵. The main Rogas that cause Sadyomarana are internal haemorrhages, brain injury, cerebrovascular accidents, oedema of lungs, and oedema inside brain.

Shareera Parivarthana during Marana

First Prana (life) gets disturbed then Durbala Angatha (weakness of body parts) and Shantha Cheshta (activities slow down) will occur by which Indriya Grahana decreases and Chaithanya (lustre) will also decrease. Fear will conquer the Manas (mind) by which memory and retaining capacity will decrease and Oja (essence of dhatus) and Theja (lustre) Hrasa (lose) will occur. Once Oja and Theja Hrasa occurs there will be change in habits, Chaya, Prathichaya and Vayu moves in opposite direction due to which Mamsa and Rakta Ksheena (decrease) will occur. The temperature of the body and firmness of joints decreases, Vikrutha Gandha comes out from Shareera, Vibhinna Rupa (different appearances), complexion and voice occurs and formation of Gomaya (cow dung) like powder from head. Then all the Shareera Gunas becomes opposite, Veerya (potency) of medicines will not work and all Panchendriya shows Ashubha Lakshnas or

Viparitha Jnana. Hence Prakruthi becomes Vikruthi and finally Marana is the result¹⁶.

ANALYSIS

Death warning and near death experience can be considered as a part of Indriya Arista. It is a term used in parapsychological research for an intimation of the death of another person received by other than the ordinary sensory channels. Sensory hallucination is telepathic in origin. Massive sensation is the apparition of a living person and considered as omen of death. In 1889 Census of Hallucination proved there is a connection between death and apparitions which is the most valuable class of death warning. The auditory hallucination occurs due to damage in vestibulocochlear nerve which can be mere knocks or ringing of bells. Mobb and Watt in 2011 claims about study regarding Near Death Experience (NDE). In MRI findings there could see the experience of other worldly substances may be due to change in neurotransmitter level in brain. Using neuro imaging techniques they proved NDE may be located in locus coeruleus system responsible for regulation of nor epinephrine which is important in sleep awake cycle and may account for sensations associated with NDE

Death bed phenomena is a part of Indriya Arista which includes a range of paranormal experiences that occurs both to people who are dying, those who are with them when they die and who are emotionally close to them. Example: the person associated with the dying person sees him even from many miles away, their pets howling or behaving as they arrived, clocks suddenly stops and electrical devices spontaneously gets switched on.

Arista in Nadi Shastra can be the following; an excessively weak and thread rapid running pulse associated with marked cardiac weakness is a forerunner of death. The pulse that beats very slowly in a nearly complete and persistent heart block of high grade is a grave condition. The extremely soft pulse shows both cardiac failure and vasomotor paralysis.

Chaya and Prabha Arista can be the following. The blackish discolouration seen in dehydration, haemochromatosis, uraemia, Lohitha Varna in a flushed face and hypertension. Neela Varna in cyanosis and congenital heart disease, Peeta Varna in obstructive jaundice. Oblique and rectus muscles affected in 4th and 6th nerve palsy where vision is affected, half part of vision is affected in pituitary tumour, cerebellar tumour, and cerebellar abscess and hallucination are Arista.

CONCLUSION

It needs high skill and keen observation to understand and identify these features in patient which indicates nearby

death. After the explanation of Indriyasthana, Chikitsa Sthana is explained by that means if there is Arista Lakshana, such patients are not to be treated. Various parameters based on sense organs, general appearance and features related to environmental changes are explained that indicates nearing death of the patient. Some of the factors are beyond scientific explanation and beyond rational identification. Then it comes tough to convince in present days, the every aspect of Arista. Yet attempts have made to touch the tip of an iceberg to understand the reasoning behind the concept of arista. Apart from observation and inference there cannot be any instrumental research that can be carried over for analysis of Arista. Yet we have to conclude that Arishta Lakshanas do appear in gross or subtle manner which is an alarming sign. Unfortunately most of the physicians ignore observing the patients directly and rely much on instrumental diagnosis due to which this great science and skill still remains mysterious.

REFERENCES

1. K.R. Srikanthamurthy. Sushruta Samhitha. Varanasi: Chaukamba Orientalia;2010.p(120)
2. K.R. Srikanthamurthy. Sushruta Samhitha. Varanasi: Chaukamba Orientalia;2010.p(137)
3. Acharya Y.T. Caraka Samhitha by Agnivesha. Varanasi: Chaukamba Orientalia; 2010.p(371)
4. Acharya Y.T. Caraka Samhitha by Agnivesha. Varanasi: Chaukamba Orientalia; 2010.p(357)
5. Acharya Y.T. Caraka Samhitha by Agnivesha. Varanasi: Chaukamba Orientalia; 2010.p(358)
6. Acharya Y.T. Caraka Samhitha by Agnivesha. Varanasi: Chaukamba Orientalia; 2010.p(357)
7. Acharya Y.T. Caraka Samhitha by Agnivesha. Varanasi: Chaukamba Orientalia; 2010.p(360)
8. Acharya Y.T. Caraka Samhitha by Agnivesha. Varanasi: Chaukamba Orientalia; 2010.p(370)
9. Anonymous. Yogaratnakara, Vidya Lakshmi Shastri Vidyodini Hindi Commentary, edited by Brahma Shankar Shastri, 7th edition. Varanasi: Chaukamba Sanskrit Santhan;1993.p(10-13)
10. Anonymous. Yogaratnakara, Vidya Lakshmi Shastri Vidyodini Hindi Commentary, edited by Brahma Shankar Shastri, 7th edition. Varanasi: Chaukamba Sanskrit Santhan;1993.p(5-10)
11. Acharya Y.T. Caraka Samhitha by Agnivesha. Varanasi: Chaukamba Orientalia; 2010.p(363)
12. Dwivedi Ramnatha. Arista Vijyana. Varanasi: Chaukamba Vidya Bhawan;1973.p(169-185)
13. K.R.Srikanthamurthy.Sushruta Samhitha. Varanasi: Chaukamba Orientalia;2010.p(139)
14. Dwivedi Ramnatha. AristaVijyana. Varanasi: Chaukamba Vidya Bhawan;1973.p(136-168)
15. Dwivedi Ramnatha. AristaVijyana. Varanasi: Chaukamba Vidya Bhawan;1973.p(186-207)
16. K.R.Srikanthamurthy. Sushruta Samhitha. Varanasi: Chaukamba Orientalia;2010.p (141-143)

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