

Literary review of *SamanaKaala* and assessment of *karma* of *Mishi* in *SamanaKaala* with special reference to *Agnimandya*

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Abstract:

The basic principles and unique concepts are the backbone of Ayurveda, the ancient and divine literature. Pertinent application of these concepts and principles in diagnosis and treatment is one of the fundamental factors leading to phenomenal results in clinical practice. Bhesaja kaala is one of the exceptional concepts stated in Ayurveda. Along with appropriate drug selection, correct dosage, the kaala i.e., timing at which the medicine is administered plays a decisive role in affectivity of the medicine. Samana Vayu, a vata dosha variant is closely associated with agni and is quoted to be treated by medicines administered in Samana kaala. While referring our classics one can conclude that main site of *Samana Vayu* is considered to be *Jatharagni*, however references prove that it has an extensive range of functions and entire body can be contemplated as *Sthana of SamanaVayu*. While reviewing the previous research, less work was carried out on the Concept of '*Samana Vayu*' with reference to Assessment of '*SamanaKaala*' hence this study was conducted. A thorough review of Samana vayu and *mishi* in ancient text was done and references were compiled. *Mishi* was administered in samana kaala and its effect was recorded. The data obtained was utilized to comprehend the concept of bhesaja kaala and *deepan karma* of *mishi*.

Key words: *Samana Vayu, SamanaKaala, Mishi, Agnimandya.*

Introduction:

Ayurveda is the most ancient medical science of the world, which is still in practice, is in phase of renaissance and in the coming century there are all probabilities that it would be the global medicine. The endurance of this science is due to its sound basic principles, which are precise, eternal, practically applicable and still holding capacity to incorporate the ultramodern trends in the coming days of world-wide acceptance to this science.

Vayu is one of the basic constituents of the body. Out of '*Tridosha*', it has prime importance as; it is the only '*Bhavapadartha*', having '*Gati*' (i.e., motion). *Vayu* gives stimulation to all

bodily performed actions or metabolisms. The *Vayu Tattva* though one, is classified into five types (*Panchatma Vayu*) according to '*Sihana*' and '*Karya*' for the sake of '*Nidan*' and '*Chikitsa*' to attain the ultimate goal of *Ayurved* i.e., '*Swasthya*'. '*Saman*' is one of the types of '*Vata*'. It resides mainly near '*Jatharagni*'; thus '*Agnisandhukshana*' is the most important function performed by it.

'*Agnimandya*' leads to all types of diseases. Therefore, it is essential for a '*Vaidya*' to maintain '*Sama*' state of '*Agni*'.

BheshajKaala is another important factor whilst treatment of the disease. '*BheshajKaala*' is the timing in which the drug is to be administered. '*Kaala*' plays a significant role while treating the disease and drug administered in improper '*Kaala*' is certainly less effective.

Aims and Objects:

While reviewing the previous research less work was carried out on the Concept of '*Samana Vayu*' with reference to Assessment of '*SamanaKaala*'. This assessment was done to study and clinically evaluate the importance of '*Samana Vayu*' in '*Agnimandya*'. *Mishi* is described as an deepan dravya, this study also focuses on the effects of '*Mishi*' (*Foeniculum vulgare*) administered in '*SamanaKaala*' (in between the meal) on '*Agnimandya*'.

Materials and Methods:

Literary review of Bruhat-trai, Laghu-trai, literature in the form of ancient and contemporary texts, was done to comprehend the concept of '*SamanaKaala*' and '*Agnimandya*'.

Clinical study comprised of 30 patients of *Agnimandya*. '*Mishi*', a '*Deepan dravya*' according to *Sharangdhara*, was used as drug of choice. Special Performa was prepared to keep the records of the patients. The drug was administered for a period of seven days. After seven days follow-ups were recorded on the special format. Statistical assessment was carried out at the end of the study.

Criteria for Inclusion:

1. Patients having lakshana of *Vataja* and *Kaphaja Agnimandya* as mentioned in texts.
2. Patients aging between 12 to 60 years.
3. There was no restriction about sex, caste, area, economical condition and religion etc.

Criteria for Exclusion:

1. Children below 12 years and adults above 60 years.
2. Patients of *PittajAgnimandya*'.
3. Individuals having '*Sama - Agni*'.
4. Patients on medications (Ayurvedic as well as of other pathy).
5. Female with menstrual disorders.
6. Patients having signs and symptoms related to any other systems other than digestive system.

Protocol:

1. **Consent:** Informed written consent was taken from each patient.
2. **Assessment:** The Performa was fixed for the assessment of the patients. While assessing the patients first *Agniparikshana* was carried out. In *Agniparikshana*,
 - Overall intake and qualities of food were recorded to assess *Abhyavaharana Shakti* and *Kshudha*.
 - For assessment of *Annapachana-shakti* onset of eight factors after meal, was recorded in terms of hours. These eight factors were as follows,
 - a. *Udgarashuddhi*
 - b. *Utsaha*
 - c. *Sharira Laghava*
 - d. *Trishna*
 - e. *Kshudha*
 - f. *Malotsarjan*
 - g. *Mutrotsarjan*
 - h. *Vatanuloman*

At the end of the clinical study i.e, after administering *Mishi* in *Madhyabhojan kaala* for 7 days, onset timings of these eight factors were recorded again for the assessment of *Pachana karma* of *Mishi*.

Agnimandya was diagnosed mainly on the basis of five symptoms, which are already mentioned in our texts, namely *Adhmana*, *Udaragaurava*, *Udara-shoola*, *Kshudha-mandya* and *Asamyak- malapravrutti*.

During clinical study following *Anubandhi Lakshanas* (Associated symptoms) were observed, *Anannabhilasha*, *Amlika*, *Udaradaha*, *Hrullasa*, *Aruchi*, *Adhovatapravrutti*, *Daurbalya*, *Alasya*, *Urodaha*, *Mukhapak*, *Hikkabahulya*, *Bhrama*, *Chhardi*, *Shirahshool*, *Udgarabahulya*, *Asyashosha* and *Antra-kujana*. At the end of the study clinical evaluation of these symptoms was carried out.

To assess the *Dushti hetus*, which have already mentioned in *Ashtanaga Hriday nidan sthan 16th* chapter, namely *vishamashana*, *ajeernashana*, *sheeta ashana*, *sankeerna bhojan*, *akala shayana – jagar*, specific questionnaire was designed regarding *Aahar & Vihara*.

3. Gradation and Scoring:

According to severity *Agnimandya* was graded as follows;

- a. Any one or two symptoms present – Mild
- b. Any three symptoms present – Moderate
- c. Any four or five symptoms present – Severe.

For application of statistical test at the end of clinical study, each of five symptoms was graded as:-

- 1 – Absent / once in a week
- 2 – Twice a week
- 3 – Thrice a week
- 4 – Four or more times a week.

4. Drug dose:

Dosage of any type of drug which is in powdered form is approximately 10 gms / Day, according to *Sharangadhara*. To decide a drug dosage first pilot study was carried out. In this study, the drug was given in the quantity of 2 gms., 3 gms. And 5 gms. It was observed that, the results were same when drug is administered in the quantity of 3 gms., as that of 5 gms. And also, it was comparatively high as that of 2 gms. So, to minimize the drug quantity, dosage was fixed as 6 gms. i.e., 6 gms.3 gms. Twice a day.

5. **Kaala:** *Mishi* was administered in *Madhya bhojan* (in between the meals i.e twice a day)

6. Anupana

The drug was given with Jala.

7. Follow- up: -

After seven days a follow-up was taken on the special follow-up sheet. Firstly, the onset of eight factors, (which were taken prior to clinical study), were again recorded. Then symptoms of the patients were assessed according to gradations. Lastly the quantity of *Ahara* was recorded.

SamanaKaala Literary review:

According to *Acharya Charaka* drug should not be administered in two cases namely *AtipatitKaala* (beyond specific Kaala) and *ApraptitaKaala* (prior to specific Kaala) *Bheshaja-siddhi* cannot be achieved without proper knowledge of *Kaala*.

न ह्यतिपतित कालमप्राप्तकालं वा भेषजमुपयुज्यमानं यौगिकं भवति, कालो हि भैषज्यप्रयोगं पर्याप्तिमभिनिर्वर्तयति । च. वि. 8/128

भैषज्यप्रयोगपर्याप्तिमभिनिर्वर्तयति भेषजप्रयोगसाध्यसिद्धिमित्यर्थः । च. वि. 8/128 चक्र.

As per *CharakaSamhita*, there are ten *BheshajaKaala* of which *Madhya-bhakta Kaala* is termed as *SamanaKaala*.

भैषज्यकालो भुक्तादौ मध्ये पश्चान्मुहुर्मुहुः ।

सामुद्रं भक्तसंयुतं ग्रासग्रासान्तरे दश ॥ च. चि. 30/296

Madhya-bhakta means in-between the food. Drug administered in *Madhya-bhakta Kaala*, is enclosed by the food from above and below affecting the *Urdhva* as well as *Adhogati* of the drug. So, the drug administered in *SamanaKaala*, comes in the phase of digestion and it is useful in the diseases of *Madhya deha*. *Sushrutacharya* has used a typical term for this phenomenon; it is *Avisaribhavat*. *Dalhana*, the commentator of *Sushrut Samhita* has explained the term as a nature of dispersion.

मध्ये तु पीतमपहन्यविसारिभावाच्चे मध्यदेहमभिभूय भवन्ति रोगाः । सु. उ. 64/67

अविसारिभावात् अविप्रसवणभावात् । सु. उ. 64/67

Due to this property of *Samana Kaala*, the drug administered in *Samana kaala*, is extremely useful for *Shamana*. The drug ought to be administered in *SamanaKaala* in the following conditions –

- *Agnimandya*
- *Samanavikruti*
- *Agni vikruti*
- *Koshthagatavyadhi*
- *Pittajvyadhi*

मध्यभक्तं मध्ये भक्तस्य तत्समानानिलविकृतौ ।

कोष्ठगतेषु च व्याधिषु पैत्तिकेषु च ॥ अ. सं. सू. 23/15

Drug review:

Sanskrit Name – *Mishi* Latin Name – *Foeniculum vulgare / Anethum foeniculum*.

Family – *Umbeliferrae*, Habitat – A native of Europe but commonly cultivated throughout India.

Synonyms: *Madhura, Misi, Mishreya, Talaparni, Shatapushpa, Madhurika, Ashvabala, Shita-shiva, Tikta, Shali, Shaleya, Shalini, Talapatri, Karavi, Chhatra, Avakpushpi, Samhita-pushpika, Surasa*.

In *Bruhat-trai* there is a reference about *Shatapushpa* for the purpose of *Asthapanabasti*. But there is no mention about *Mishreya*. It is firstly introduced in the *Nighantu*.

Gana –

- *Raj Nighantu – Shathvadivarga*
- *Dhanvantari Nighantu – Shatapushpadivarga*
- *Shaligrama Nighantu – Haritakyadivarga*
- *Bhavprakasha Nighantu – Haritakyadivarga*
- *Madanpal Nighantu – Shunthyadivarga*
- *Kaiyyadev Nighantu – Oshadhivarga*
- *Nighantu adarsha – Jivakadivarga*

Rasa – Tikta, Madhur, Katu.

Virya – Ushna, Vipaka – Katu

Guna – Laghu, Tikshna, Ushna, Ruksha.

Karma – Deepana, Pachan, Hrudya, Vrushya, Balya

Standard sample –

According to British Pharmacopoeia (B.P), fennel seeds should contain not less than 1.4% of volatile oil, not more than 2% foreign organic matter, and 1.5% acid-insoluble ash. The Indian Pharmacopoeia (I.P.C.) permits up to 4% foreign organic matter. Powdered fennel consists of dried fennel fruits ground to pass through 54-mesh screen. It should contain, not less than 1% volatile oil, according to B.P.

Observation and Results:

Taking into consideration the *PradhanaLakshanas*, *Asamyakmalapravrutti* was observed in 83.33%, *Adhmanain* 73.33%, *Kshudhamandya* in 60%, *Udarashoolain* 33.33% and *Udaragaurav* in 20% of the subjects

Considering *AnubandhiLakshanas* *Anannabhilasha* was observed in 20%, *Amlika* was observed in 16.66%, *Udaradaha*, *Hrullasa* and *Aruchi* were in 13.33%, *Adhovatapravrutti*, *Daurbalya*, *Alasya*, and *Urodah* were in 6.66%, *Mukhapak*, *Hikkabahulya*, *Bhrama*, *Chhardi*, *Shirahshool*, *Udgarabahulya*, *Asyashosha* and *Antra-kujana* were observed in 3.33%,

50% of the subjects were of moderate category, 36.66% were of mild category and 13.33% were of severe category.

Effect of the *Mishi* in *SamanaKaala* on *Asamyakmalapravrutti* was 84%, on *Adhman* was 77.27%, on *Udaragaurav* was 66.67%, on *Kshudhamandya* was 61.11% and *Udarashool* was 50%.

It was observed that, *Anubandhilakshana* like *Adhovat-pravrutti*, *Urodaha*, *Antrakujan* and *Asyashosha* got 100% relief when *Mishi* was administered in *SamanaKaala*. However there was no change in *lakshana* like, *Mukhapak*, *Bhrama*, *Udgarabahulya*, *Shirahshool*, *Daurbalya* etc.

After applying statistical test, it was observed that the effect of *Mishi* administered in *SamanaKaala*, was highly significant in *Adhman*, *Udarshool* and *Asamyakmalapravrutti*& significant in *Udaragauravand Kshudhamandya*.

Discussion:

Bheshaja kaala plays an important role while treating the disease. For a successful *vaidya* not only the selection of appropriate drug is required but for a *yojana*, *matra* and *kaala* are also of prime importance.

मात्रा कालाश्रया युक्तिः सिद्धिर्युक्तौ प्रतिष्ठिता ।

तिष्ठत्युपरि युक्तिज्ञः द्रव्यज्ञानवतां सदा ॥ च. सू. 2/16

As per *Sharangadhara Samhita* the diseases originating from *agnimandya*, *Madhya bhojana kaala* is the choice to improve *deepana* property of *agni*.

समानवाते विगुणे मन्देऽग्नावग्निदीपनम् ।

दद्याद्भोजनमध्ये च भैषज्यं कुशलो भिषक् ॥ शा. सं. पू. खं. 2/6

Clinical study was comprised of 30 subjects, out of which, 63.33% were in between the 15 – 30 years of age. For this particular group, they were consuming food at irregular timings or they had a habit of having regular fast food and late-night studies. These could be the reasons for occurrence of higher incidence of GI tract disorders.

It was observed that amongst the *Samanya Dushtihetu* of *Samana vayu*, *Sheetashana* and *Ajeernashana* were proportionately high.

Udgarashuddhi was observed in the 56.66% subjects within first 3 hours after meal. *Utsaha* was observed in the 60% of the subjects within first 3 hours after meal. 63.33% of the subjects could not observe the onset of *ShareeraLaghava*. *Trushna* was observed in the 56.66%, of the subjects within first 3 hours after meal. Onset of *Kshudha* was found within 3-6 hrs of meal in 53.33% and within 6 – 9 hours after meal in 40% of the subjects. In 90% of the subjects, it was found that, the onset of *Malotsarjan* was after 15 - 18 hours of that of the meal. Not an single individual could observe *Vatanulomana*. Onset of the eight factors was also recorded after the drug course. There were no significant changes found. So we can say that, seven days course of *Mishi*, in the quantity of 3 gms, twice a day, in *bhojanmadhya kaala*, does not have significant effect on *annapachan-shakti*. It underlines, the *siddhanta*, पचेन्नामं वह्निकृच्च दीपनम् (*deepana dravya* performs only *agnideepan* and not the *pachana karma*) of *Sharangadhara*

According to the p – value, we can conclude that, the results were highly significant in *Udarashool, Adhman* and *Asamyakmalapravrutti*.

Conclusion:

While referring our classics one can conclude that main site of *Samana Vayu* is considered of prime importance with respect to *Jatharagni* however, it has an extensive range of functions and entire body can be contemplated as *Sthana of SamanaVayu*. In the *vikruti* of *Samana Vayu*, *bhojana Madhya* kaala is very important as far as drug administration is concerned. *Ajeernashan* and *Sheetashan* play an important role in *Samana Vayu Dushti*. *Mishi* is very much effective in *Adhman, Udarshooland Asamyak- malapravrutti* and has no significant effect on *annapachana shakti*, when it is administered in *SamanaKaala*, for 7 days; which underlines the only *Deepan* property of *Mishi*.

Bibliography:

1. CharakSamhita : with commentary of Chakrapanidatta, Editor – YadavajiTrikamaji Acharya, Publisher : Chaukhamba Sanskrit Sansthan. Edition 4th – 1994
2. SushrutSamhita : with commentary of Dahlana, Editor – YadavajiTrikamaji Acharya, Publisher : Chaukhamba Orientalia, Edition – 5th – 1995
3. Ashtanga Sangraha : With commentary of Indu, Editor – Vaidya Anant DamodarAthavale, Published – 1980.
4. Ashtanga Hridaya – with commentaries of Arunadatta&Hemadri, Editor – Pt. Hari Sadashiv Shastri, Publisher :ChaukhambaSurabharatiPrakashan, Varanasi. Edition – 6th - 1939 athavaSarthaSavivaran Patanjali Yogadarshan, Author : Shri. K. K. Kolhatkar, Publisher: DhavlePrakashan, Mumbai. Edition – 7th 1989
5. Fundamentals of Ayurveda : Author – Dr. M. Mahadevshastri, Edition – April 1990
6. Concept of Agni in Ayurveda with reference to Agnipariksha. Author – Vaidya Bhagavan Dash. Publisher – ChaukhambaAmarbharatiPrakashan. Edition – 2nd – 1993
7. Digestion and Metabolism in Ayurveda : Author – C. Dwarakanath. Edition – 2nd – 1997.
8. Purushavichaya : Author – V. J. Thakar, Publisher – Gujrat Ayurved University, Edition – 1st – 1984

9. ShaareeraTattvadoshanamaVatadidoshaVidnyanam : Author – Purushottam S. Hirlekar.
10. TrdoshatattvaVimarsha : Author – Vaidya Ramraksha Pathak, Publisher – BaidyanathAyurved Bhavan Ltd. Edition – 4th – 1981
11. Prashnopanishada : Editor – S. K. Devdhar, Publisher – Prasad Prakashan, Edition – 1990
12. ChhandogyaUpanishad : Editor – S. K. Devdhar, Publisher – Prasad Prakashan, Edition – 1990
13. Upanishad VakyaMahakosh – Shree Gajanan Shambhu Sadhale, Edition 1st 1940
14. BhavaprakashNighantu : Editor – Viashvanath Dwivedi Shastri, Publisher – Motilal Banarsidas, Edition – 9 th, 1977 Delhi
15. Raj Nighantu: Author – Narahar Pandit, Hindi commentary -Indradev Tripathi. Publisher – Krishnadas Academy, Varanasi. Edition year – 1982
16. Kaiyadev Nighantu: Editor – Priyavrat Sharma & Dr. Guruprasad Sharma. Publisher – ChaukhambaPrakashan, Edition year – 1979
17. Indian Materia Medica: Author- K. M. Nadkarni, Publisher – Bombay Popular Prakashan. Edition – 3rd 1982.
18. Wealth of India (volume 4): Publisher – Council of Scientific and Industrial Research, New Delhi. Edition – 1st– 1956
19. DravyagunaVidnyan (second Volume): Author – Vaidya Priyavrat Sharma, Publisher – Chaukhamba Bharati Academy. Edition – 17th - 1995