



Comparative Pharmaceutico-analytical Study of Vyoshadi Vati Prepared with Agnisiddha and Anagnisiddha Method

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ABSTRACT

Vati is one the pharmaceutical dosage forms of medicine used in Ayurveda. Systemic pharmaceutical procedure or method explanation is available in sharangdhara Samhita & those two different methods are Agnisiddha method and anagnisiddha method. Formulations where guda, guggulu etc drugs are in higher quantity those are recommended to follow agnisiddha method. Rest formulations concern anagni siddha method is recommended. Few can be prepared by following both methods, like vyoshadi vati. Vyoshadi vati contains guda as chief ingredient. It was prepared by following both methods and subjected to analytical quality tests to rule out the pharmaceutical quality. They were subjected to Organoleptic characters analysis, Physical constants & pharmaceutical standard analysis tests as per Indian Pharmacopoeial parameters at practical pharmacy and analytical lab of Rasashastra & bhaishajya Kalpana department BLDEA's AVS Ayurveda Mahavidyalaya. Organoleptic characters vyoshadi vati prepared by both methods found same i.e colour was Black, ingredient Odour, Bitter in Taste, smooth in touch. After preparation of tablets subjected to Physical constants & Pharmaceutical standards were tested. Results were in the normal limits & similar compared to each other.

Keywords: Vyoshadi vati, agnisiddha method anagnisiddha method, quality control tests

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INTRODUCTION

Ayurveda the science of life, evolved as a comprehensive system of health care.[1] In the Ayurvedic field of practice through several types of oushadhi Kalpanas (dosage forms) are being Practiced, among them Vati Kalpana (tablet/Pills) in one. [2] Which comes under solid dosage forms. It has many advantages like easy administration, palatability, convenient form for dispensing & transporting, to keep the medicine potent for long time. [3] Today, as the demand for herbal products is increasing day by day, enough availability of raw materials with reasonable prices is a big challenge for the industries. Hence, some strict steps must be taken by the government as well as industries itself to fulfill the supply and meet market demand. There is a need to ensure correct raw materials for the medicine and for this purpose, it is important to carefully monitor entire cycle of raw material collection such as harvesting, processing, transportation, and storage before their use. [4] In earlier days Ayurvedic practitioners were prepared medicine in their own house and provided their patients but now pharmaceutical companies are grown and prepared large scale of medicine with using so many sophisticated equipment's to fulfill the demand of public by preparing bulk quantity of medicines at a time. So, the Equipment's like Tablets making machine, Pill making machine etc. are being used by pharmaceutical companies. Hence the question of quality arises on medicine.

In the ayurvedic pharmaceutical text two types of Vati preparation methods are mentioned, those are 1) Agnisiddha vati and 2) Anagnisiddha vati. [5] Agnisiddha vati: In case of Agnisiddha vati preparation, paaka (semi solid) form of sugar or jiggery (guda) or guggulu obtained on heating with mild fire then the powders of the ingredients are added to paka. Which will attain consistency of soft sticky mass paste like then vati is to be made by rolled into circular in shape. [6] Anagnisiddha vati: in this process vati is prepared without heat or preparing paaka. The uniform mixture of powders of ingredients are either pounded with Guggulu, guda or subjected to trituration (wet grinding) with prescribed liquid

or honey as per the formulation to prepare the vati [7] Based on this both pharmaceutical procedures are followed in preparation of Vyoshadi vati were subjected to quality analysis as per pharmaceutical standards. To evaluate changes in standards hence study is undertaken with title "Pharmaceutico – Analytical Study of Vyoshadi Vati Prepared with Agnisiddha and Anagnisiddha method".

MATERIAL AND METHODS

Materials

- A) Pharmaceutical study – Materials required for the preparation of vyoshadi vati according to sharangadhara Samhita [8] reference were collected from practical pharmacy of BLDEA's AVS Ayurveda Mahavidyalaya Vijayapur.

Table no 1: Showing the list of ingredients of Vyshadi vati, their proportion & quantity used.

S.No	Ingredients	Latin name	Quantity
1	Pippali	<i>Piper longum Linn.</i>	1part
2	Maricha	<i>Piper nigrum Linn.</i>	1part
3	Shunti	<i>Zingibetr officinalea Roxb</i>	1part
4	Chavya	<i>Piper cheba Hunter.</i>	1part
5	Chitrakaa	<i>Plumbagao Zylanic Linn.</i>	1part
6	Jeeraka	<i>Cuminum cyminum Linn</i>	1part
7	Talisapatra	<i>Abbes webbiana Lindl.</i>	1part
8	Amlavetasa	<i>Rhume emodi wall. Mesissn</i>	1part
9	Tintidaka	<i>Tamarindus indica Linn.</i>	1part
10	Twak	<i>Cinnamomum zeylanica Blume.</i>	1/4 th part
11	Ela	<i>Elettaria ardmomum Maton.</i>	1/4 th part
12	Tamalapatra	<i>Cinnamomum tamala Nees.</i>	1/4 th part
13	Guda		20 parts

- B) Analytical study

Materials required for analytical study were collected from analytical lab Dept of Rasashastra & Bhaishaja kalpana of BLDEA's AVS Ayurveda Mahavidyalaya Vijayapur.

Methods

- A) Pharmaceutical study

Vyshadi vati was prepared as per Sharangadhara samhita mahyama khanda 7thchapter 22-23 Sloka

Table no 2: Showing the list of ingredients of Vyshadi vati, their proportion & quantity used.

S.No	Ingredients	Latin name	Quantity	Quantity used
1	Pippali	<i>Piper longum Linn.</i>	1part	100 gm
2	Maricha	<i>Piper nigrum Linn.</i>	1part	100 gm
3	Shunti	<i>Zingibetr officinalea Roxb</i>	1part	100 gm
4	Chavya	<i>Piper cheba Hunter.</i>	1part	100 gm
5	Chitrakaa	<i>Plumbagao Zylanic Linn.</i>	1part	100 gm
6	Jeeraka	<i>Cuminum cyminum Linn</i>	1part	100 gm
7	Talisapatra	<i>Abbes webbiana Lindl.</i>	1part	100 gm
8	Amlavetasa	<i>Rhume emodi wall. Mesissn</i>	1part	100 gm
9	Tintidaka	<i>Tamarindus indica Linn.</i>	1part	100 gm
10	Twak	<i>Cinnamomum zeylanica Blume.</i>	1/4 th part	25 gm
11	Ela	<i>Elettaria ardmomum Maton.</i>	1/4 th part	25 gm
12	Tamalapatra	<i>Cinnamomum tamala Nees.</i>	1/4 th part	25 gm
13	Guda		20 parts	2000gm

Method:

Preparation of Agnisiddha Vyoshadi vati (V1)

- Tintidaka & Amlavetasa were pounded well and to this fine powder of other ingredients except only Guda were added. Finally, uniformly mixture was prepared.
- Guda was taken in a vessel and heated on a stove.
- After confirming the Guda paka, previously prepared uniform mixture of ingredient powder was slowly added to it.
- This mixture was starred well so that powder mixes well to form uniform mixture.
- When guda containing powder mixture attained sticky pill mass consistency, pills were prepared manually.
- These pills were dried & stored in airtight glass container.

Preparation of Anagnisiddha Vyoshadi vati (V2)

- Tintidaka was pounded well and to this fine powder of other ingredients (except guda) were added, mixed & uniform mixture was prepared.
- This mixture was added to guda in little-by-little quantity to guda along with constant pounding.

- After adding up of complete mixture of powder pounding up was continued and confirmed that whole uniform mixture was prepared.
- When guda containing powder mixture attained sticky pill mass consistency pills were prepared manually.
- These pills were dried & stored in airtight glass container.

B) Analytical study:

Final product was initially subjected to organoleptic characters analysis then physical constants [9] & pharmaceutical standard tests were tested [10]

Moisture content, specific gravity, pH, ash value was tested and uniformity in size, weight, friability, hardness, dissolution, disintegration tested under pharmaceutical quality analysis tests.

RESULTS AND DISCUSSION

Basically, tablets are one of the solid dosage forms of medicine. It's found in classics tablets are prepared in two methods those are Agnisiddha method and Anagnisiddha method. In this regard vyoshadi vati was prepared by following both methods and subjected to quality analysis to rule out its quality & effect of pharmaceutical procedure on it. Vyoshadi vati mainly contains guda hence it can be prepared by both the methods so in present work vyoshadi vati is prepared by agnisiddha method where all mixture of ingredients added to guda paka later on vati were prepared. In anagnisiddha method guda and other ingredients were mixed by proper mixing in Ulukhula yantra with constant pounding until it attains sticky pill mass consistency [1-3]. Later on, vati were prepared. Thus, prepared vyoshadi vati were stored in airtight container and further used for analytical study. To prepare agnisiddha vyoshadi vati 100 gms of Shunthi, maricha, Pippali, Chavya, Chitraka, Jeeraka, Talisapatra, Amlavetasa, Tintidaka, 25 gms of Twak, Ela, Tamalapatra, and 2000 gms of Guda. Used and after procedure 2900 gm of final product obtained. 75 gm of loss observed. To prepare anagnisiddha vyoshadi vati 100 gms of Shunthi, maricha, Pippali, Chavya, Chitraka, Jeeraka, Talisapatra, Amlavetasa, Tintidaka, 25 gms of Twak, Ela, Tamalapatra, and 2000 gms of Guda. Used and after procedure 2920 gm of final product obtained. 55 gm of loss observed [4-5].

Pharmaceutical point of view its observed that duration take to prepare vyoshadi vati prepared by anagnisiddha (V2) method was less compare to vyoshadi vati prepared by agnisiddha method (V1). During the pharmaceutical procedure of V2 ingredients mixture took more time to mix as guda was paste like in form. It required more physical strength during mardana in khalwa yantra. Meanwhile in the preparation of V1 as guda paka was prepared hence comparatively less time was taken to prepare it.

Both variety of vati were subjected to analytical tests. Organoleptic characters there was no change vyoshadivati prepared with agnisiddha & anagni siddha method. Analytical point of view results of both agnisiddha and anagnisiddha tablets were similar but in disintegration, dissolution tests Anagnisiddha vyoshadi vati has taken more time compared to Anagnisiddha vyoshadi vati this may be due to following the paka vidhi in pharmaceutical method. Indicating comparatively slower absorption of ingredients. Overall significant changes were not noted. This has given scope to evaluate therapeutic efficacy by clinical study [6].

Table no 3: Showing the quantity of ingredients used to prepare agnisiddha & anagnisiddha Vyshadi vati.

S.No	Ingredients	Latin name	Quantity in gm	
			Agnisiddha method	Anagnisiddha method
1	Pippali	<i>Piper longum Linn.</i>	100	100
2	Maricha	<i>Piper nigrum Linn.</i>	100	100
3	Shunti	<i>Zingiber officinale Roxb</i>	100	100
4	Chavya	<i>Piper cheba Hunter.</i>	100	100
5	Chitrakaa	<i>Plumbago Zylania Linn.</i>	100	100
6	Jeeraka	<i>Cuminum cyminum Linn</i>	100	100
7	Talisapatra	<i>Abies webbiana Lindl.</i>	100	100
8	Amlavetasa	<i>Rhume emodi wall. Mesissn</i>	100	100
9	Tintidaka	<i>Tamarindus indica Linn.</i>	100	100
10	Twak	<i>Cinnamomum zeylanica Blume.</i>	25	25
11	Ela	<i>Elettaria ardmomum Maton.</i>	25	25
12	Tamalapatra	<i>Cinnamomum tamala Nees.</i>	25	25
13	Guda		2000	2000
Final product quantity			2900	2920
Loss during preparation			75	55

Table no 4. Showing the Organoleptic constituents vyoshadi vati

S.No	Organoleptic character	Vyoshadi vati	
		Agnisiddha vati	Anagni siddha vati
1	Colour	Dark Brown.	Dark Brown.
2	Odour	Specific.	Specific.
3	Touch	Soft	Soft
4	Taste	Bitter	Bitter
5	Appearance	Amorphous Powder	Amorphous Powder

Table no 5. Showing Physical constant values of vyoshadi vati.

Sl.no	Physical Constants	Results of vyoshadi vati	
		Agnisiddha vati	Anagni siddha vati
1	pH value	6.1 w/v	6.4 w/v
2	Specific gravity	1.003	1.001
3	Ash value	8%	8%
4	Moisture content	1.5%	2%

Table no 6. Showing Pharmaceutical Standards Test values of Vyoshadi vati

Sr.no	Pharmaceutical standards	Results of vyoshadi vati	
		Agnisiddha vati	Anagni siddha vati
1	Uniformity of size	8.552mm	8.258 mm
2	Uniformity of weight	496 mg	488 mg
3	Hardness	3 kg	3.3 kg
4	Friability	0 %	0 %
5	Disintegration	30 min	40 min
6	Dissolution	40 min	45 min

CONCLUSIONS

Vyoshadi vati is a poly herbal formulation and it is prepared by two methods Anagnisiddha and Agnisiddha methods. In Agnisiddha method guda paka was prepared, it was almost like of leha. To it fine powder mixture of all ingredients was added & vatis were prepared. In Anagnisiddha method uniform mixture of all ingredients with guda taken in khalwa yantra and mixed well further vati were prepared. Analytical point of view results of both Anagnisiddha vyoshadi vati and Agnisiddha vyoshadi vati were similar but in disintegration, dissolution tests Anagnisiddha vyoshadi vati has taken more time compared to Anagnisiddha vyoshadi vati this may be due to following of paka vidhi in pharmaceutical method.

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