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Murvadi Agada-QC Analysis, Method of Preparation & its Uses in Current Scenario

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ABSTRACT:

Murvadi Agada is a unique and useful formulation, which is specifically prescribed for *Agni Vikara's*. It is a compound herbal preparation that is explained under the context of "*Garopahat Paavaka*" i.e. a condition which is a result of impaired *Agni* caused due to administration of *Gara visha*. The formulation is a sole contribution of *Asthanga Kara's* which is not explained elsewhere. *Murvadi Agada* has to be administered with *Anupanas* like *Ushana Jala, Takra, Mastu and Amla Rasa Dravyas*. *Gara visha* condition in present era can arise due to addition of toxic substances like animal excreta, toxic medicines, *viruddhaushadhi* etc to food substances. In current scenario all the junk food, colouring agents, food additives, preservatives, packed food items and drinks can be taken as *Gara Visha*. This may produce *Agni Vikara's* (digestive disorders) like *Sthoulya, Arsha, Attisara, Udara Rogas* etc. *Murvadi Agada* administered with proper *Anupana* can help in these diseases.

Keywords: *Murvadi agada, Garopahatpaavaka, Anupana, Gara visha, Agnivikara's*

INTRODUCTION

In Ayurveda, the concept of *Gara visha* is well explained. *Gara visha* can be understood as artificial low potent poisons¹. *Gara Visha* is a blend of both *Savisha* and *Nirvisha Dravya's* from animate and inanimate origin². At present *Gara visha* can be considered as unhygienic, unprocessed or irregularly cooked meats of various animals, or most of the infections which depends on the meats of animals where they grow. Most of the microbes (Bacteria, Parasites and Fungus) grow on the meat. There after growing release endotoxins or exotoxins resulting into food infections and deleterious effects over body.

Gara visha is usually mixed along with *Anna painadi* of a person whom to be killed. It is done usually by ladies either for *Vashikarana*, to get attention, or due to grudge or due to threatening by enemies^{3,4,5}.

By the consumption of *Gara visha*, a person can show *Garopahata paavaka* (diseases related to digestive power) and *Garophata Twacha* (diseases related to skin). *Pandutwa, Krsata, Alpagni, Kasa, Swasa, Jwara, Sopha, Adhmana, Udara, Pliharoga, Duarbalya* are the diseases related to *Garopahata paavaka*. *Asadhya lakshanas* of *Gara Visha* are explained as vitiation of *Manovaha Srothas* (*Garaja Unmada, Syava Vadanam* (Discoloration on face)



, loss of immunity and health (*Nashta Chaya, Bala and Indriya*),^{6,7,8}

As per *Acharya Charaka*, *Gara Visha* are the substances derived from that off *Sthavara* and *Jangama*. The ideal nature of these being *Avipaaki*- difficult for digestion, thus stays for a long time and produces disease.⁹

As per the *Chakrapani*, the commentator of *Charaka Samita* opines that *Gara Visha* is a combination arising out of *Savisha* and *Nirvisha dravya's* and is *Chirakaari* and *Roga janakakari*.¹⁰ *Acharya Sushruta*, explained *Agada Tantra* as *Vividha visha samyoga krita* which is nothing but *Gara Visha* ¹¹ *Acharya Vagbhata* , opinion is that *Gara visha* is a type of *Krithrima visha* prepared by using various substances. Even though it is non- toxic or less toxic substances, by the *Paka* (metabolism) they eventually act as toxins.^{12, 13}

Murvadi Agada References:

Asthanga Hridaya/Uttarasthan/35th Chapter
Asthanga Sangraha/Uttarsthana/40th Chapter

Murvadi Agada Ingredients:- Shown in Fig- 1

Methods Of Preparation:

- All the ten ingredients of good quality are taken in raw form in equal quantity.
- They all are prepared in *Sookshma Choorma* (120mesh) separately and sieved.
- In the *Khalava*, all the drugs are mixed homogenously for more than seven times.
- The homogenously mixed *Choorma* is kept in UV chamber under UV rays for more than 2 hours and packed in airtight container/pouch. (photos)

Dosage: 1 *karsha* (12gm)

Shelf Life: 2years

Table 1: Review of *Murvadi Agada* Ingredients¹⁴

Table 2: *Rasa Panchaka Of Murvadi Agada* Ingredients

Table: 3 Properties of *Anupana of Moorvadi Churna*

Table 4. QC analysis

Table 5. Tests for Alkaloids

Table 6.*Murvadi agada*

DISCUSSION

Gara visha is a considered as articles which are by virtue of their qualities or low potency or due to combination of non- poisonous substances or even by a competent medicine which is opposite to the *Shareera* results in

pathology. If such *Gara* enters into the *Shareera* then due to its *Apaaki Guna* it causes disturbances in the *Agni* and deranges it by causing *Ama*, which further initiates the chain of *Vyadhi Utpatti*. In present, *Gara Visha* can be considered as unhygienic, unprocessed or irregularly cooked meats of various animals. Other parts can be understood as hoof, hairs, bones, teeth, etc. Most of the times, all these parts are accidentally mixed with foods and consumed, produces ill-effects in the individuals. *Acharaya's* have explained the intentions of Poisoning clearly as- Homicidal, Accidental. *Gara visha* is explained as poison which is usually mixed along with *Anna Pannadi* of a person whom to be killed. It is done usually by ladies who either for *Vashikarana*, to get attention, or due to gurdges, or due to threatening by enemies. Accidental poisoning is also seen when the ladies unknowingly or accidentally prepares certain preparations which results in such poisoning. The factors that make this poison to be different from other categories are its intentional use. During ancient times it was used for different purposed as *Vasya, Vyadhikaraka or Maraka*. Chances for accidental poisoning are also more. *Gara* is known for its *Avipaaki* and is known for *Alpa Veerya* (low potency) hence it is not producing acute actions and will not undergo proper digestion and assimilation. As a result it is not properly digested and accumulated leading to *Agnimandya*. This gradually leads to “*Srotorodha*” when there is *Srotorodha*, dosha's are further vitiated and results in impairment of *Dhatuparunama*. Manifestation of diseases is mainly depending on the *Agni* of a person. *Agni* may be either *Dhaatwagni* or *Bhootagni* or even *Jatharagni*. When there is a hindrance in these *Agni*, then *Ama* is produced due to improper digestion of the *Ahaara* that we consume. *Gara* when enters into the body vitiated *Agni* due to its inherent qualities like *Apaaki Guna*. Amount of *Ama* collection depends on the digestive capacity, nature of the food, frequency of ingestion etc, certain substances or food articles which are unwholesome if entered into body results in certain pathologies which differ from person to person. If the *Agni* is disturbed due to *Gara Visha*, the *Murvadi Agada* can be used, as it alleviates all *Garopahata Vikaras*. *Murvadi Agada* has *Deepaka, Pachaka, Grahi, Anulomaka, Shula Prashamaka & Pitta Saraka* properties and if administered with proper *Anupana* helps in the correction of *Agni Mandya* caused by *Gara Visha*.

CONCLUSION

Murvadi Agada is prepared by combination of ten drugs,

which is helpful in treating various diseases produced by *Agni Mandhya* caused due to *Gara Visha* which is prepared artificially by the combination of various poisonous and non-poisonous substances. *Gara Visha* is classified under *Kritrima* or *Sanyogaja Visha*. The formulation is explained by *Asthanga Kaara's* only. *Acharya Vagbhat* states that production of *Ama* in the body lead to the same symptoms like that of poison²³. On the basis of this, *Ama* can be considered as *Gara*. According to *Dalhana* commentary, *Gara Visha* is not always used intentionally, but sometimes it may be taken accidentally also. The defects of digestion were considered as pathogenic. *Ama* is condition due to defected digestive power. Ethological factors of *Ama* can be considered under exogenous and endogenous factors. The exogenous factors enter into the body through ingestion, inhalation and injections. As per the definitions it is understood that *Ama* refers to an endotoxin. This toxin is a harmful material formed in the body at the level of gut or even at the level of cellular metabolism. Incompatibility is also very much connected with intrinsic toxin²⁴. Mass outbreaks should be considered among the *Gara Visha* as it is due to accidental poisoning. *Murvadi Agada* if administered with proper *Anupana* like *Ushana jala*, *Takra*, *Mastu*, *Amla rasa dravyas*; it shows better results. All the *Agni Vikara* caused due to *Gara Visha* can be treated with administration of *Murvadi Agada* with proper *Anupana*. In today's scenario junk food, food additives, preservatives, packed drinks etc. can be considered as *Gara Visha*. This will produce all the *Agni Vikaras* like *Sthoulya*, *Arsha*, *Attisara*, *Udara Rogas* etc. These signs and symptoms are same as that of *Gara Visha*. *Murvadi Agada* can be used in treating all the *Agni Vikaras*.

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Fig 1- *Murvadi Agada* Ingredients



Amruta



Chavya



Chitraka



Murva



Musta



Patola



Pippali



Tagara



Vaca



Vidanga

TABLE 1:Review of *Murvadi Agada* Ingredients¹⁴

Sl No	Drug	Botanical	Family	Chemical composition	Action
1.	<i>Murva</i>	<i>Marsdeniataenacissima Wight. & Arn.</i>	Asclepiada ceae	17 α -Marsdenin, 17 β -marsdenin, D-cymarose acetic acid, cinnamic acid , etc	Colic pain
2.	<i>Guduci</i>	<i>Tinosporacordifolia</i>	Menisperm aceae	Tinosporine, tinosporon, tinosporic acid, tinosporide, columbin, etc	Anthelmintic, antispasmodic, anti-inflammatory, antipyretic, stomachic, constipating, digestive, appetiser
3.	<i>Tagara</i>	<i>Valerianajatamansi</i>	Valerianac eae	Actinidine, carotene, calarenol, elemol, jatamols A and B, etc	Bactericide, carminative, stomachic, laxative, sedative, etc
4.	<i>Pippali</i>	<i>Piper longum Linn.</i>	Piperaceae	N-4,5-trimethoxy cinnamoyl, n-hexadecane , n- heptadecane ,etc	Thermogenic, purgative, diuretic, stomachic, digestive, anthelmintic
5.	<i>Patola</i>	<i>Trichosanthesdioica Roxb.</i>	Cucurbitac eae	Riboflavin, vitamin C, thiamine, linoleic, oleic, etc	Purgative
6.	<i>Cavya</i>	<i>Piper retrofractum vahl</i>	Piperaceae	Piperlongumine, Piperidine, n-nonadecane, n-eicosane, zinziberine, p-Cyenne, piperine, pipalartin, glycoside	
7.	<i>Chitraka</i>	<i>Plumagozeylanica Linn</i>	Plumbagin aceae	Plumbagin, 3-chloroplumbagin, chitranone, zeylinone, etc	Stomachic, carminative, anthelmintic, dysentery, leukoderma, ascites, etc
8.	<i>Musta</i>	<i>Cyperusrotundus Linn</i>	Cyperaceae	B-sitosterol, 4 α , 5 α -oxidoeudesm-11-en- 3 α -ol, pinene, cineol etc	Anti-inflammatory, stomachic, diuretic, nervine tonic, anthelmintic, etc
9.	<i>Vidanga</i>	<i>Embeliaribes Burm. f.</i>	Myrsinacea e	Embelin, quercitol, tannin, embolic acid, resinoid, etc	Digestive, stomachic, diuretic, anthelmintic
10.	<i>Vaca</i>	<i>Acrous calamus Linn</i>	Araceae	Asarone, β -asarone ,cala,enol , calamine, eugenol, etc	Stomachine, diuretic, laxative, antispasmodic, anti-inflammatory, insecticidal, flatulence, etc

TABLE 2:*Rasa Panchaka of Murvadi Agada Ingredients*

Sl No	Drug	Rasa	Guna	Veerya	Vipaka	Karma	Rogagnata
1.	<i>Murva</i> ¹⁵	<i>Tikta, kashaya</i>	<i>Guru, ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphahara, Pittahara, Vatahara, Visaghna</i>	<i>Amadosha, Amlapitta, Vivandha, Krimi, etc</i>
2.	<i>Guduci</i> ¹⁵	<i>Tikta, Kashaya</i>	<i>Guru, snigdha</i>	<i>Ushna</i>	<i>Madhura</i>	<i>Balya, Dipana, Rasayana, Sangrahi, Jvaraghna, Tridosasamaka</i>	<i>Aruchi, Agnimandya, Shoola, Amlapitta, Pravahika, Atisara, Grahani, Krimi, Jwara, etc</i>
3.	<i>Tagara</i>	<i>Tikta, katu, kashaya</i>	<i>Laghu, snigdha</i>	<i>Katu</i>	<i>Ushna</i>	<i>Visaghna, Tridosahara, Raktadosahara, Manasadoshara</i>	<i>Agnimandhya, Udarashoola, Anaha, Jwara, Visha, etc</i>
4.	<i>Pippali</i> ¹⁶	<i>Katu</i>	<i>Laghu, snigdha, tikshna</i>	<i>Anushna sheeta</i>	<i>Madhura</i>	<i>Dipana, Hradya, Kaphara, Ruchya, Recana, Vrsya, Vatahara, rasayana</i>	<i>Ajeerna, Aruchi, vibandha, Gulma, Udarashoola, Shotha, Amvata etc</i>
5.	<i>Patola</i> ¹⁸	<i>Tikta</i>	<i>Laghu, snigdha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphapittahara, Vrsya, Varnya, Dipana</i>	<i>Aruchi, Agnimandhya, Ajeerna, Trishna, Amlapitta, Atisara, Krimi, Udararoga, etc</i>
6.	<i>Cavya</i> ¹⁶	<i>Katu</i>	<i>Laghu, ruksha, tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Bhedana, Dipana, Kaphahara, Pacana, Recana, Vatahara</i>	
7.	<i>Chitraka</i> ¹⁶	<i>Katu</i>	<i>Laghu, ruksha, teekshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Sothahara, Dipana, Grahi, Pacana, Kaphavatahara, Sulahara</i>	<i>Ajeerna, Agnimandya, Jeernaprathishyaya, Grahani, Gudashotha, etc</i>
8.	<i>Musta</i> ¹⁷	<i>Tikta, katu, kashaya</i>	<i>Laghu, ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Sothahara, Dipana, Grahi, Krmighana, Pacana, Visaghna, Pittakaphahara, Jvaraghna</i>	<i>Kaphapaittikavikara, Twakavikara, Aruchi, Agnimandya, Ajeerna, Vishavikara, Sangrahani</i>
9.	<i>Vidanga</i> ¹⁶	<i>Tikta, katu</i>	<i>Laghu, ruksha, teekshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Anulomana, Dipana, Krminasana, Vatakaphahara</i>	<i>Krimidanta, Agnimandya, Ajeerna, Chhardi, Udarashoola, Adhmana, Vibhandha,</i>
10.	<i>Vaca</i> ¹⁶	<i>Katu, tikta</i>	<i>Laghu, teekshna, sara</i>	<i>Ushna</i>	<i>Katu</i>	<i>Dipana, Krimihara, Kanthya, Kaphahara, Medhya, Vatahara, Vamak</i>	<i>Amajeerna, Aruchi, Vibandha, Adhamana, Krimi, Asharee, etc</i>

Table: 3

Properties of Anupana of Moorvadi Churna

Anupanas	Doshagnata	Properties
<i>Ushnambu (Hot water)</i>	<i>Kapha vata</i>	Removes <i>Meda</i> (fat) and <i>Ama</i> , <i>Deepana</i> (stimulates digestive fire), <i>Basti Sodhanam</i> (cleanses urinary bladder), alleviate <i>Swasa</i> (dyspnoea), <i>Kasa</i> (cough), <i>Jwara</i> (fever) and is always wholesome ¹⁹
<i>Takra (Butter milk)</i>	<i>Kapha vata</i>	Having <i>Kashaya Amla Rasa</i> (astringent and sour taste) <i>Deepana</i> (stimulates digestive fire), alleviates <i>Sopha</i> (swelling), <i>Udara</i> (ascites), <i>Arsha</i> (piles), <i>Grahani</i> (irritable bowel syndrome), <i>Mootra Graha</i> (incontinence of urine), <i>Aruchi</i> (tastelessness), <i>Pleeha</i> (splenomegaly), <i>Ghrita Vyapath</i> (complication due to ghee intake), <i>Pandu</i> (anaemia) ²⁰
<i>Mastu (Whey)</i>	<i>Kapha vata</i>	<i>Amla-Kashaya-Madhura Rasa</i> (sour, astringent and sweet taste), <i>Laghu</i> (light), removes <i>Trishna</i> (thirst) and <i>Klama</i> (exhaustion), <i>Srotho Vishodana</i> (cleanses channels), <i>Avrishya</i> (non- aphrodisiac), <i>Prahladana</i> (pleasing), <i>Preenana</i> (satiating), quickly breaks faeces down, strengthens the body quickly and produce <i>Baktha-Chandha</i> (desire for food). ²¹
<i>Amla rasa dravya</i> (substance having sour taste)	<i>Vata</i>	Causes <i>Agni Deepthi</i> , <i>Hridhya</i> (conductive to heart), <i>Pachana</i> (digestive), <i>Rochana</i> (appetiser), having <i>Ushna Veerya</i> (hot potency), <i>Preenana</i> (satiating), <i>Kledana</i> (slimy), <i>Laghu</i> (light), causes aggravation of <i>Kapha</i> and <i>Pitta</i> , <i>Mooda Vatanulomana</i> (makes inactive <i>Vata</i> move downwards). ²²

Table 4. QC analysis

Drugs	Part	Colour	Taste	Odour	Foreign Matter	Ash Value	Acid Insoluble Ash	Water Soluble Extract	Alcohol Soluble Extract
<i>Murva</i>	Root	Yellow to buff	Slightly bitter	Indistinct	Nil	3.128%	0.1489%	16.078%	8.911%
<i>Guduci</i>	Stem	Light brown	Bitter	Characteristic	Nil	7.021%	0.896%	11.179%	3.503%
<i>Tagara</i>	Rhizome	Yellowish Brown	Bitter	Strong and Reminiscent of isobaleric acid	Nil	1.950%	0.350%	23.280%	-
<i>Pippali</i>	Fruit	Greenish – black to black	Pungent	Aromatic	Nil	5.976%	0.242%	30.986%	19.043%

<i>Patola</i>	Whole plant	Brown	Bitter	Not specific	Nil	7.500%	1.127%	9.080%	3.201%
<i>Cavya</i>	Stem	Greyish Brown	Acrid	Peppery	Nil	9.086%	1.098%	7.456%	4.411%
<i>Chitraka</i>	Root	Reddish to deep brown	Acrid	Disagreeable	Nil	2.795%	0.599%	16.072%	13.343%
<i>Musta</i>	Rhizome	Dark brown or black externally, creamish yellow internally	-	Pleasant	Nil	1.398%	0.723%	25.044%	9.289%
<i>Vidanga</i>	Fruit	brownish black	Astringent	Slightly aromatic	Nil	4.812%	1.020%	9.732%	13.197%
<i>Vaca</i>	Rhizome	Light brown to pinkish externally, buff coloured internally	Pungent & bitter	Aromatic	Nil	4.868%	0.099%	33.227%	24.582%

Table 5.
Tests for Alkaloids

S.No.	Tests	Water	alcohol
1.	Test for Steroids	Positive	Positive
2.	Test for Flavonoids	Positive	Positive
3.	Test for Alkaloids	Negative	Negative
4.	Test for Tannins	Positive	Positive
5.	Test for Cardiac Glycosides	Positive	Positive
6.	Test for Anthraquinone Glycosides	Negative	Negative
7.	Test for Saponin Glycosides	Positive	Negative

Table 6.
Murvadi agada

S.No.	Color	Touch	Taste	Consistency	Odour	Total Ash	Water soluble Extractive	Alcohol soluble extractive	pH value
<i>Murvadi Agada</i>	Light brownish	Smooth	Astringent	Powder	Characteristic	9.036%	17.432%	9.649%	6.23%