

Action of Bilwadi Agad in management of Food Poisoning w.s.r. to Visuchika - A Case Study

Patil SS^{1*}, Lambat RD²


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^{1*} Sonal S Patil, Post Graduate Scholar, Dept of Agadtantra Evum Vidhivaidyak, Govt Ayurved College, Nagpur, Maharashtra, India.

² Rajendra D Lambat, Head of Department, Dept of Agadtantra Evum Vidhivaidyak, Govt Ayurved College, Nagpur, Maharashtra, India.

Bilwadi Agada is a polyherbal Ayurvedic formulation. It is a choice of drug in acute toxico-pathological conditions. The 13 ingredients of Bilwadi Agad are Bilwa, Surasa, Karanja, Nata, Suvaha, Haridra, Daruharidra, Triphala, Trikatu. It is indicated in various conditions such as Sarpa Dansha, Loota Visha, Unduru Visha, Vrischika Visha, Visuchika, Ajeerna, Gara Visha, Jwara Bhoota Badha etc. Drugs found in Bilwadi Agad mostly have the qualities of Deepana, Pachana, Anulomana, Shoolhara, Krimighna, Jwaraghna, and Vishaghna and it acts on the Kapha-Vata. Visuchika is a condition in which vitiated Agni causes over-affection of Ama leading to expulsion of Doshas though both upper and lower passage. Food poisoning which is classified under acute gastroenteritis caused due to ingestion of food contaminated by either bacteria or nonbacterial toxins. It causes hypersecretion of fluid and electrolytes which is the underlying cause of watery consistency of stool in cases of food poisoning. This can be clinically corelated with the concept of Visuchika in ayurveda. Bilwadi Agad when used in such cases have seen to be effective in relieving the symptoms of food poisoning. The purpose of this paper is to explore the use of Bilwadi Agada as a treatment for Visuchika.

Keywords: Visuchika, Bilwadi Agad, Gastroenteritis, Vishaghna

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Introduction

Food poisoning is a form of acute gastroenteritis caused by consuming contaminated food or drinks. The contamination may result from bacteria such as *Staphylococcus aureus*, *Salmonella*, *Cholera*, *E. coli*, or *Clostridium*, or from nonbacterial toxins like enterotoxins or harmful substances in certain foods. Enterotoxins, which are produced by some bacteria, are especially significant in non-bacterial food poisoning. These toxins lead to the excessive secretion of fluids and electrolytes into the intestines, causing symptoms like diarrhea, nausea, vomiting, and abdominal pain. The increased fluid release is responsible for the watery stool commonly seen in food poisoning cases. Symptoms usually develop within 12 hours of ingestion of contaminated food. Symptoms differ as per the severity, Some common symptoms are - Loose or watery stool for more than 5-10 times, Presence of pus cells, mucus and sometimes blood, Tenesmus, pain in lower abdomen during defecation, Hyperpyrexia, Mucosal hyperemia due to mucosal invasion etc.[1]

Management of gastroenteritis by conventional medicines is essential as well as life saving in acute and fatal conditions, but the complication of Gastroenteritis as well as disturbance of gastric flora by antibiotics is sometimes causing patient trouble more than disease itself. Sometimes patient have irregular bowel habit even for more than six months. If such patients give additional support of Ayurvedic medicines, complication as well as toxic effects of conventional therapies can be minimized.

Visuchika is Amapradoshaja Vyadhi as described by *Acharaya Charaka*. [2] This condition indicates a severe disruption in the digestive process and the movement of *Vata*, which governs bodily functions such as digestion and waste elimination. *Visuchika*, refers to a condition characterized by sharp, pricking pain in the abdomen and other parts of the body, caused by an imbalance of *Vata* due to improper digestion. A defining feature of *Visuchika* is the simultaneous expulsion of undigested food through both the upper and lower gastrointestinal passages, resulting in vomiting and diarrhea along with *Murchha*, thirst, pain, *Bhrama* (vertigo), anorexia, headache occurring together. *Visuchika* is often triggered by the consumption of poorly prepared, stale,

Or incompatible foods, as well as irregular and improper eating habits that disturb the normal functioning of *Jatharagni* and leading improper digestion of ingested food resulting the abnormal formation of the *Rasa Dhatu*. When this undigested or poorly digested substance, known as *Ama Annarasa*, undergoes fermentation it becomes toxic and harmful, referred to as *Annavisha*. The combination of *Annavisha* or *Amarasa* with vitiated *Tridoshas* in the *Amashaya* (stomach) and *Pakvashaya* (intestines) initially causes obstruction (*Sanga*) in their normal passage, followed by symptoms of *Vimarga-Gamana* (wrong movement) and *Atipravritti* (excessive flow), leading to vomiting and diarrhea, respectively. All three doshas are involved, with *Vata* predominating, which causes acute abdominal pain.[3]

Visuchika as a Disease

Samprapti: The aggravated *Doshas* affect the undigested food and get mixed up with it. This combination obstructs a part of stomach and rapidly moves through upward and downward tracts separately to produce *Visuchika* as per involvement of particular *Dosha*. **Vata:** produces colic pain, malaise, dryness of mouth, fainting, giddiness, irregular power of digestion, rigidity of sides, back and waist and contraction and hardening of vessels. **Pitta:** causes fever, diarrhea, internal burning sensation, thirst, intoxication, giddiness etc. **Kapha:** causes vomiting, anorexia, indigestion etc. **Lakshanas:** "*Murchatisara Vamathu*" i.e., fainting, diarrhea, vomiting, thirst, abdominal pain, giddiness, rigidity of extremities, more of yawning, burning sensation, shivering, pain in heart region and headache are the signs and symptoms of *Visuchika*. [4] *Visuchika* and acute gastroenteritis (food poisoning), both the diseases have similarities in their etiology, pathogenesis and clinical presentations. The specific characteristic of having acute abdominal pain along with diarrhea and vomiting is duly described under both the diseases. That is why food poisoning can be correlated with the ayurvedic concept of *Visuchika*. [5] *Bilwadi Agad* having *Vishaghna*, *Jwaraghna*, and *Visuchikahara* properties of the various ingredients in it is a drug of choice applicable to mitigate the symptoms of the condition in this case study. Treatment typically aims to restore balance to the *doshas*, enhance digestion, and alleviate symptoms such as vomiting and diarrhea through dietary adjustments,

Herbal remedies, and therapeutic measures to calm Vata and support the digestive system.

Aim and Objectives

The main aim of this study is to document the effect of *Bilwadi Agad* in management of Food Poisoning w.s.r. to *Visuchika*

Case Report

A 29 yr male patient (IT Engineer- office job) with chief complains of- frequent loose stools (*Drava Mala Pravrutti*)- 7-8 times, vomiting (*Chhardi*)- 3-4 times, Abdominal pain (*Udarshula*), Headache, General weakness with *Bhrama*, Thirst, Anorexia since 3 days.

Past History

The patient has highly stressful work life with long work hours and has a habit of excessive eating of junk food with irregular sleep patterns. Patient had given H/O eating Chicken Manchurian and noodles a day before symptoms occurred 4days ago.

Personal History

Diet - Non vegetarian
Appetite - normal.
Bowel - irregular
Habits - No addiction.

Ashtavidha Parikshan

Nadi - Vata Pradhan Pitta.
Mala - Atipravrutti (7-8 times/day)
Mutra - Prakrut
Jivha - Saam
Shabda - Prakrut
Sparsha - sheet
Druka - Prakrut
Akruti - Madhyam.

Samanya Parikshan

General conditions - Fair, Afebrile.
Pulse - 94/min
Blood Pressure - 110/70 mm Hg
Respiratory rate - 20/min

Systemic Examination

RS - AEBE is Clear
CVS - S1S2-N
CNS - Conscious, Oriented to time, place, persons.

Investigations

- Routine blood test: TLC = 7800/cumm, N74; L36; M02; E02; B05; Hb gm% = 12.6gm/dl, PLT = 2.1lakh/cumm.
- RBS = 102gm/dl

Materials and Methods

Name of drug	Aushadhimatra	Aushadhikaal
Bilwadi Agad Gutika (500mg)	1 Gutika twice a day (1 - 1)	After food with Luke warm water

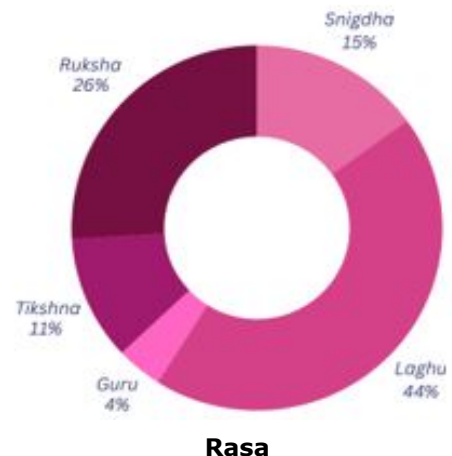
बिल्वादि गुटिका

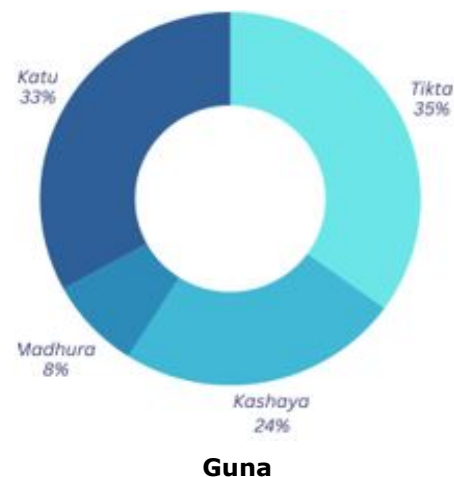
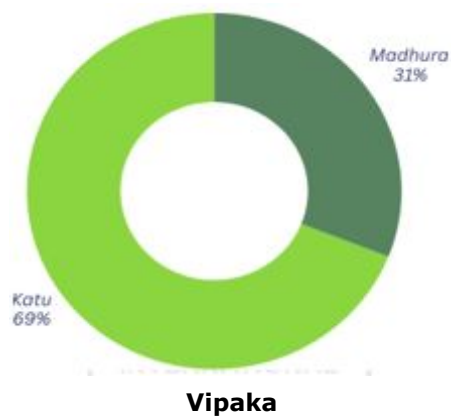
बिल्वस्य मूलं सुरसस्य पुष्पं फलं करञ्जस्य नतं सुराह्वम् । फलत्रिकं व्योषनिशाद्वयं च बस्तस्य मूत्रेण सुसूक्ष्मपिष्टम्॥८४॥
भुजङ्गलतोन्दुर वृश्चिकाद्यैर्विषुचिकाजीर्णं गरज्वरैश्च । आर्तन्नरान् भूतविधर्षितांश्च स्वस्थीकरोत्यञ्जनपाननस्यैः॥८५॥ (अष्टांगहृदय, उत्तरस्थान 36/84-85)[6]

1. Bilwadi Agad - Ingredients[7]

SN	Name of the drug	Synonym	Botanical name	Part used	Quantity
1.	Bilwa	Mahakapittha	Aegle marmelos	Moola	1 part
2.	Surasa	Tulasi	Ocimum sanctum	Pushpam	1 part
3.	Karanja	Naktamala	Pongamia pinnata	Phala	1 part
4.	Natam	Tāgaram	Valeriana wallichii	Moola	1 part
5.	Surahwam	Devadaru	Cedrus deodara	Kandasara	1 part
6.	Haritaki	Abhaya	Terminalia chebula	Phala	1 part
7.	Bibhitaki	Akshaphala	Terminalia bellerica	Phala	1 part
8.	Amalaki	Dhatri	Embica officinalis	Phala	1 part
9.	Shunti	Vishwabheshaja	Zingiber officinale	Kanda	1 part
10.	Maricha	Vellaja	Piper nigrum	Phala	1 part
11.	Pippali	Kana	Piper longa	Phala	1 part
12.	Haridra	Nisha	Curcuma longum	Kanda	1 part
13.	Daruharidra	Darunisha	Berberis aristata	Kanda	1 part
14.	Basta mutra	Goat urine			Quantity sufficient

Bilwadi Agad





2. Bilwadi Agad - Rasa, Guna, Virya, Vipaka, Karma [8,9,10]

SN	Drug Name	Rasa	Guna	Virya	Vipaka	Karma
1.	Bilwa	Kashaya, Tikta	Laghu Ruksha	Ushna	Katu	Kapha-Vataghna, Vishamjwaraghna, Shothaghna, Balya, Raktasthambhak, Grahi, Hrudya.
2.	Karanja	Katu, Kashaya, Tikta	Laghu Ruksha	Ushna	Katu	Kapha-Vata Shamaka, Krimighna, Janthughna, Raktashodhak, Kustaghna, Vishaghna, Shothaghna, Vedna Sthapana, Deepana, Pachana.
3.	Surasa	Katu, Tikta	Laghu, Ruksha	Ushna	Katu	Kapha-Vataghna, Vishaghna, Krimighna, Vishamjwaraghna, Deepana Pachana Anulomana, Janthughna, Shothaghna, Hrudya, Shwasakasahikka-Parshwashoolhara.
4.	Natam	Tikta, Katu, Kashaya	Laghu Snigdha	Ushna	Katu	Kapha-Vatashamaka, Vishaghna, Vednasthapaka, Jwaraghna, Bootaghna, Madahara, Shirorogahara, Akshepahara, Saraka, Medhya.
5.	Surawha	Tikta	Laghu, Snigdha	Ushna	Katu	Kapha-Vata Shamaka, Deepana, Kasashwasahikkahara, Shothahara, Kandughna, Jwaraghna, Tandrahara, Kushtaghna Bhootaghna, Krimighna, Raktaprasadana.
6.	Haritaki	Pachrasa, Lavan Varjit	Laghu Ruksha	Ushna	Madhura	Tridosahara, Anulomana, Rasayana, Hrudya, Indriya Prasadana, Medhya, Shothahara, Vednasthapana, Vrushya Krimighna, Kasashwasapliha-Rogahara, Vishamjwarahara.
7.	Bibhitaki	Kashaya	Laghu, Ruksha	Ushna	Madhura	Tridosahara, Krimighna, Shothhara, Raktasthambhana, Vednasthapana, Deepana, Anulomana, Jvaraghna, Shwasakasavamigara-Nashna.
8.	Amalaki	Amla Pradhan, Lavana Varjit	Guru Ruksha	Sheeta	Madhura	Tridosahara, Rasayana, Hrudya, Vyasthapana, Kanthya, Jwaraghna, Kasahara, Raktapittaghna, Shulaprashmana, Dahaprashmana, Deepana, Anulomana.
9.	Shunti	Katu	Laghu, Snigdha	Ushna	Madhura	Vata-Kaphahara, Deepana, Shothahara, Shoolaprashmana, Hrudaya, Atisarakasashwasa-Hikkahara, Vednasthapana, Naadi Utejaka. Jwarahara
10.	Maricha	Katu	Laghu, Tikshna	Ushna	Katu	Vata-Kaphahara, Krimighna, Vishaghna, Bhootaghna Hrudya, Kasashwasahara, Deepana, Pachana, Shoolaprashmana.
11.	Pippali	Katu	Laghu, Snigdha, Tikshna	Ushna	Madhura	Kapha-Vata Shamaka, Kushtaghna, Balya Jwaraghna, Rasayana, Hrudya, Deepana Shoolaprashmana, Janthughna Hikkannigrahana, Pachana, Shwaskasa-Pliharogahara.
12.	Haridra	Tikta, Katu	Ruksha Laghu	Ushna	Katu	Kapha-Vata Shamaka, Kushtaghna, Jwaraghnavishaghna, Krimighna, Raktadoshahara, Pitta Rechaka, Shothahara, Vednasthapana.
13.	Daru-haridra	Tikta, Kashaya	Ruksha Laghu	Ushna	Katu	Kapha-Pitta Shamaka, Katu-Paushtika Netrya, Vishaghna, Varnya, Shothahara, Vednasthapana, Kandughna, Krimighna, Raktashodhaka, Vishamjwaraghna
14.	Basta Mutra	Katu, Lavan	Laghu, Ruksha, Tikshna	Ushna	Katu	Kaphaghna, Vatakara, Kasashwasaghna, Shoophaghna, Pandughna

Pathya Ahara Vihara in food poisoning involves uses of light and easily digestible food, warm food, green gram, buttermilk, sufficient rest, consumption of lukewarm water, avoidance of overeating, maintenance of proper hygiene and conduction of dietary rules of Ayurveda. Simultaneously Rehydration therapy should be continued to avoid Dehydration and its complication.

Shamana Chikitsa is associated with utilization of drugs or herbs for treating condition of food poisoning such as *Bilwadi Agad*.

Observations

Patient is given a tablet of *Bilwadi Agad* of 500 mg twice a day after meal for 15 days.

Symptoms are seen to be reduced from first day itself and disappeared completely after course of 15 days.

SN	Symptoms	Before treatment	After treatment			
			Day 1	Day 3	Day 7	Day 15
1.	Loose motions. (Drava Mala Pravrutti)	7-8 times	4-5 times	2-3 times	1-2 time	-
2.	Vomiting. (Sa-anna Chardan)	3-4 times	2-3 times	0 time	0 time	-
3.	Abdominal pain. (Udarshool)	++++	+++	++	+	-
4.	Generalized weakness	+++	++	+	-	-

Discussion

The condition was diagnosed as *Visuchika* based on its history. The treatment plan was tailored according to the etiology and *Dosha* predominance. The patient was advised *Vishghna Aushadha Pana* along with *Deepana* and *Pachana*, which resulted in a prompt and favorable response. *Bilwadi Agad* is given after meal as there is *Kaphanubandhatva* in cases of *Vishaktata (Annavaisha)* in this case) and there is *Kapha* dominance after meal during *Madhura Awasthapaka*. Drugs present in *Bilwadi Agad* mostly act on the *Kapha-Vata* and possess the attributes of *Katu, Tikta Rasa, Laghu, Tikshana, Ruksha Guna, Usna Virya, Madhura Vipaka, Deepana, Pachana, Anulomana, Rochana, Shoolhara, Krimighna, Jwaraghna, Triptighna, and Vishaghna*.^[11] The *Vishaghna, Jwaraghna, and Visuchikahara* properties of the several constituents in *Bilwadi Agada* may be utilized to alleviate the symptoms of the illness.

Action of Bilwadi Agad in case of Visuchika

Karma	Bilwadi Gutika
Deepana	Surasa, Trikatu, Surahva, Triphala, Mootra
Pachana	Triphala, Trikatu, Mootra,
Grahi	Trikatu
Anulomana	Triphala
Krimighna	Surasa, Karanja, Surahva, Pippali, Maricha, Haridra, Mootra,
Vishaghna / Garanashana	Surasa, Karanja, Nata, Bibhitaki, Haridra
Jwaraghna	Surahva, Haritaki, Amalaki, Shunti, Pippali.
Janthughna / Bhootaghna	Surasa, Karanja, Nata, Devdaru, Maricha, Pippali

It has *Tridoshghna* property especially it is *Kaphvatghna* in action. 92.30 % of drugs of *Bilwadi Agada* has *Ushna Veerya* & 77% of drugs having *Vaatghna* and *Kaphghna* property.^[12] It can give relief in Swelling, itching, Skin reactions, Burning & other signs and symptoms produced due to *Visha*.

Conclusion

The pharmacological activities of all the medications in *Bilwadi Agad Yoga*, which are *Vishghna Shothaghna, Janthughna* and *Krimighna* have been shown to be anti-microbial, antiviral, antiseptic, antifungal, anti-diarrheal, and anti-protozoal which are helpful in treating acute gastroenteritis in food poisoning.^[13] An excellent *Ayurvedic* remedy for issues resulting from imbalance of the *Kapha Dosha* is *Bilwadi Gulika*. *Bilwadi Agada's* action stems from its *Samyoga Visheshata* i.e., its therapeutic effect resulting from the combination's uniqueness. The majority of the medications are *Tikta-Katu Rasa Pradhan*, which acts as a *Kapha-Vatahara*. Since most medications have *Katu Vipaka* and are *Ushna Veerya*, they might act on *Visha* as an antidote swiftly.

References

- Nagham A, Muhsin N, Anaam A. Review on Food poisoning (Types, Causes, Symptoms, Diagnosis, Treatment). 2021;3:54-61. . [Crossref][PubMed][Google Scholar]
- Acharya JT, editor. Charaka Samhita. 1st ed. Varanasi: Chaukhambha Surbharati Prakashana; 2008. p. 135. *Vimana Sthana 2, Sloke no. 11* [Crossref][PubMed][Google Scholar]
- Agnivesa. Charaka Samhita: Ayurveda Dipika Commentary of Chakrapanidatta. 1st ed. Varanasi: Chaukhamba Prakashan; 2013. p. 571. *Chikitsa Sthana* [Crossref][PubMed][Google Scholar]
- Garde GK. Sartha Vagbhat. 1st ed. Varanasi: Chaukhamba Surbharati Prakashan; 2018. ISBN:978-93-83721-83-2. *Sutrasthan chptr 8, verse 7-9. p. 37* [Crossref][PubMed][Google Scholar]
- Verma T, Sharma I. Management of food-poisoning through Ayurveda W. S. R. to *Visuchika*. *World Journal of Pharmacy and Pharmaceutical Sciences*. 2020;9(10):1271-1275 [Crossref][PubMed][Google Scholar]
- Garde GK. Sartha Vagbhat. 1st ed. Varanasi: Chaukhamba Surbharati Prakashan; 2018. ISBN:978-93-83721-83-2. p. 467. p. 36-84, 85 [Crossref][PubMed][Google Scholar]

7. Bhashagacharya Paradkar H. Ashtanga Hridaya, Uttarsthana, Sarpavishapratisheya adhyaya. 7th ed. Varanasi: Chaukhamba Orientalia; 1982. p. 913 [Crossref][PubMed][Google Scholar]

8. Gogate VM. Dravyaguna Vidyana. 1st ed. Vaidyamitra Publication; 2018. ISBN:978-8189798505. p. 310, 432, 539 [Crossref][PubMed][Google Scholar]

9. Agrahari P, et al. A brief study on Zingiber officinale - A review. JDDTBP. 2015;3:20-27. [Crossref][PubMed][Google Scholar]

10. Sharma PV. Dravyaguna Vijyan. 1st ed. Varanasi: Chaukhamba Bharti Academy; 2011. p. 753-755, 758-760, 239-241, 363-365, 163-164, 537-539 [Crossref][PubMed][Google Scholar]

11. Sharma PV. Dravyaguna Vijyan. 1st ed. Varanasi: Chaukhamba Bharti Academy; 2011. p. 455-457 [Crossref][PubMed][Google Scholar]

12. Kamal, et al. A review on Bilwadi Agada and its indications. World Journal of Pharmacy and Pharmaceutical Sciences. 2021;10(3):344-345. [Crossref][PubMed][Google Scholar]

13. Benni JM, Jayanthi MK, Suresha RN. Evaluation of the anti-inflammatory activity of Aegle marmelos (Bilwa) root. Indian Journal of Pharmacology. 2011;43(4):393-397. [Crossref][PubMed][Google Scholar]

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