

## LITERARY REVIEW OF MEDICINAL PLANTS W.S.R. TO TRIVIDH MARMA

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## ABSTRACT

Acharya charak described about *Trimarma* in *Trimarmiya Chikittsa* and also in *Trimarmiyasiddhi* in which he described about *Hriday, Sira and Basti* as physician point of view. Acharya Sushruta described Marma in Sharir Sthana of Sushruta Samhita i.e. Pratyeka Marma Nirdesa Shariram”, in which he has considered Marma, as a seat where number of tissues are agglomerated and accounted as a vital part but he explained only about 19 sadhya pranhar marma in which they explained about hriday, shira, and basti along with sankha, guda, shrangatak, kanta – sira. Marma is a ayurvedic anatomical term for vital points of the body. Out of 107 marma points, three marma are very important because they are not only the vital points but they also control the complete body system and Injury to these trimarmas quickly affects the vitality of a person and may be fatal. These trimarma are the Sira (brain), Hriday (heart) and Basti (kidney and urinary system). In today’s strenuous, sedentary and hectic lifestyle people facing severe health problems related to Heart, Brain & Kidney. All these three organs are related to each other & the disease are also interlinked to one another. One disease related to these organs may increase the severity of other organ or disease and vice versa. So, current study is taken to review the role of medicinal plants in the management of trividh marma.

**KEYWORDS:** Medicinal plants, Trividh marma, Shira, Hriday, Basti.

## INTRODUCTION

‘स्वस्थस्य स्वास्थ्य रक्षणम् आतुरस्य विकार प्रशमनम् ।’<sup>1</sup> च. सु. ३०/२६

It is a science which advocates the maintenance of health and to relieve the suffering of human being. In this modern age world, which is said to be a world of amazing achievement, is also a horrible world of stress. In todays, 21st century all the peoples were suffering from the diseases of vital organ viz. Brain, Heart and Kidney.

Brain is the primary vital organ and the normal state of this is important to carry out all the necessary procedure related to body and mind. Heart is the second most important organ which is responsible for the maintenance of blood flow throughout the body and providing the oxygenated blood to brain for its normal function. Kidney is the third most important vital organ which is responsible for the removal of all toxic elements or toxic effects of drugs from body.

Brain, Heart and kidney together called as *Trividh marma* and are placed under ten organ along which *Prana* (Life) is gets associated.

‘दशैवायतनान्याहुः प्राणाः येषु प्रतिष्ठिताः ॥  
शंखौ मर्मत्रयं कण्ठो रक्तं शुक्रौजसि गुदम् ॥’<sup>2</sup>  
च.सू. २९/०३  
मर्मत्रयमिति हृदयबस्तीशिरांसि ।<sup>3</sup>  
चक्र.

The diseases like Parkinson Disease, Cerebral vascular episode, Alzheimer disease, Paralysis, insanity, Anxiety etc. are related to Brain, while the diseases like HTN, CHF, MI, IHD are related to Heart and that of renal calculi, urinary incontinence, renal failure etc. are related to kidney and all these disease are interlinked to each other. Hence there is an importance to maintain the normal state of these entire three vital organs.

हृदये मुर्ध्नि बस्तौ च नृणां प्राणाः प्रतिष्ठिताः ।

तस्मात् तेषां सदा यत्नं कुर्वीत परिपालने ॥<sup>४</sup>

च.सि. ०९/०९

हेतुलिंग औषधज्ञानं स्वस्थातुरपरायणम् ।

त्रिसूत्रं शाश्वतं पुण्यं बुबुधे यं पितामहः ॥

च.सू. १/२४

Hence, the primary aim of this study is to maintain the health of individuals by maintaining the balance between the Dosha-Agni-Dhatu and normal excretory functions of body and there by maintaining equilibrium between mental and physical condition of body.

“समदोषः समग्निश्च समधातुमलक्रियः ।

प्रसन्नात्मैन्द्रियमनाः स्वस्थ इत्यभिधीयते ॥”<sup>५</sup>

– सु.सू.१४/४७.

Herbal drugs are found to treat the diseases of *Trividh Marma*. Hence these drugs like Bramhi, Arjuna, Punarnava, Haritaki etc are used to cure to control to prevent and to maintain the normal states of *Trividh Marma*.

The importance of *Dravya* in the treatment can be stated as follows:<sup>[6]</sup>

#### AIMS AND OBJECTIVES

1. To Provide the useful information regarding the drugs used in *Trividh Marma* to Prevent and to cure the disease of vital organs.
2. To Study the Mechanism of Action of *Dravya* which are Useful in *Trividh Marma* by both *Ayurved* as well as modern science.

#### MATERIAL AND METHOD

This Study Is Carried Out By Critical Reviews. Searching Various Classical Text Book Like *Samhita*'s & *Nighantu* Along With Medical Database Like Pubmed, Dhara, Google Scholar.

#### CLASSIFICATION OF MARMA

This *Trividh Marma* can be classified as follows in three heads viz.:

- 1) **Ashrita**: The organs which are in association with it.
- 2) **Vyadhi**: Disease of that *Marma*
- 3) **Dravyani Upayuktani**: Useful drug in the managements of disease of that *Marma*.

**Table 1: Classification of *Trividh Marma*.**

	शिरमर्म	हृदयमर्म	टास्तिमर्म
आश्रितः	शिरसि इन्द्रियाणि इन्द्रियप्राणवहानि स्त्रोतांसि सूर्यमिव गभस्तयः संश्रितानि ।	तत्र हृदये दशधमन्याः प्राणापानौ मनो बुद्धिःचेतना महाभुतानि च ।	बस्तिस्तु स्थूलगुदमुष्कसेवनीशुक्रमुत्रवाहिनीनां नाडीनां मध्ये मूत्रधारो अम्बुवहाना सर्वस्त्रोतसा उदधि इव अपगानां ।
व्याधि	पंचविध शिरोरोग, सुर्यावर्त, अर्धावभेदक, उन्माद, अपस्मार. Epilepsy, Migrain, Alzimer Disease, Paralysis etc.	पंचविध TMदरोग. Hypertension, MI, Stroke, Ventricular Failure etc.	मुत्राघात, मुत्राश्मरी, प्रमेह इ. Renal Failure, Renal Calculus, Nephrotic Syndrome etc.
द्रव्याणि उप युक्ताणि	हरीतकी, ब्राम्हि, शूठी, शंखपुष्पी, वचा, तगर, गुडुचि.	हरितकि, अर्जुन, शूठी, पुष्करमूल, गुग्गुल, रसोन, बल्लातक, गुडुचि.	गोक्षुर, पुनर्नवा, पटोल, जम्बु, पुग, तृणपंचमूल, दशमूल इ.

#### CLASSIFICATION OF DRUG

The drugs are classified under *Trividh Marma* as per their uses in the management of disease condition of *trividh marma*.

The drugs can be classified under two heads as<sup>[1]</sup> *Vyadhipratyaynik* and<sup>[2]</sup> *Rasayana*.

	शिरमर्म	हृदयमर्म	बस्तिमर्म
व्याधि प्रत्ययिक द्रव्य	Bramhi. Shankhpupshi. Tagara. Kapikacchu. Guduchi.	Arjuna. Shunthi. Rasona. Guduchi. Bhallataka. Pushkaram ula.	Gokshur. Punarnava. Jambu. Patola. Dasha- Mula. Truna- Panchamul

		a.
रसायन द्रव्य	Haritaki, Bhallatak, Aamalaki, Guggul, Guduchi.	

**COMMON ACTION OF DRAVYA**

The common action of *Dravya* can be explained with the help of following *Shloka* as:

किंचिद्रसेन कुरुते कर्म वीर्येण चापरम् ।

द्रव्यं गुणेन पाकेन प्रभावेण च किंचन् ॥<sup>8</sup>

च.सू. २६/७१

From above *Shloka* it is clear that the some of drugs can be acts by their *Rasa*, some by their *Virya*, Some by their *Guna* and some by their *Prabhava*.

**HERBS ACTING ON SHIRA MARMA****१] ब्राह्मी**

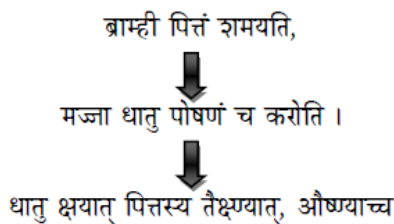
ब्राह्मी हिमा सरा तित्ता लघुर्मध्या च शीतला ।

कषाया मधुरा स्वादुपाकायुष्या रसायनी ॥

स्वर्या स्मृतिप्रदा कुष्ठपाण्डुमेहास्त्रकासजित ॥<sup>9</sup>



Fig. Brahmi (*Bacopa monnieri*).

**A] Mechanism of action of *Bramhi* in Mental Disorder (*Manas roga*) according to Ayurveda:<sup>[10]</sup>**

मनोव्यापाराः विकृता भवन्ति ,स्मृति हानिः

बुद्धिभ्रंश्च जायते



तदा पित्तस्य शान्त्यर्थं मज्जा धातु पानार्थम च  
ब्राह्मी घृतं, ब्राह्मी स्वरसो वा अतिव प्रशस्तः ।

१. वातोत्तरे मानसरोगे शंखपुष्पि प्रशस्ता ।
२. पित्तोत्तरे मानसरोगे ब्राह्मी प्रशस्ता ।
३. कफोत्तरे मानसरोगे निर्गुण्डि, वचा, कुष्ठं च प्रशस्ता ।
४. मुण्डी पुराणे तथा वात-कफजे च अपस्मारे हिता ।

**B] Mechanism of action of *Bramhi* according to Modern****1. Antioxidant *in vitro*<sup>[11]</sup>**

- It inhibits Acetyl cholinesterase,
- Activates Choline acetyl transferase and
- Increases cerebral blood flow in rats.
- Studies suggest that protective effect in animal models of Neuro-degeneration.
- So as a Neuro-regenerative.

**2. Clinical studies<sup>[11]</sup>**

- Cognitive function,
- Memory enhancing in human subjects.

So, *Bacopa monnieri* enhances protein kinase activity in the hippocampus which may contribute to its No-tropic action and Aids in repair of damaged neurons by

- Enhancing kinase activity,
- Neuronal synthesis,
- Restoration of synaptic activity and
- Ultimately nerve impulse transmission.<sup>[12]</sup>

**C] Active Constituents of *Bramhi*<sup>[12]</sup>**

Alkaloids, Saponins, Sterols, Bacosides A and Bacosides B are the active constituents of *Bacopa monnieri*.

Bacoside A usually co-occurs with Bacoside B and are Major constituents & shown to be responsible for neuro-pharmacological effects and the nootropic action of BM in animals & human beings.

So, *Bramhi* can be used as Neuro-Regenerative, Cognitive & Memory Enhancing.

**HERBS ACTING ON HRUDYA MARMA****१] अर्जुन**

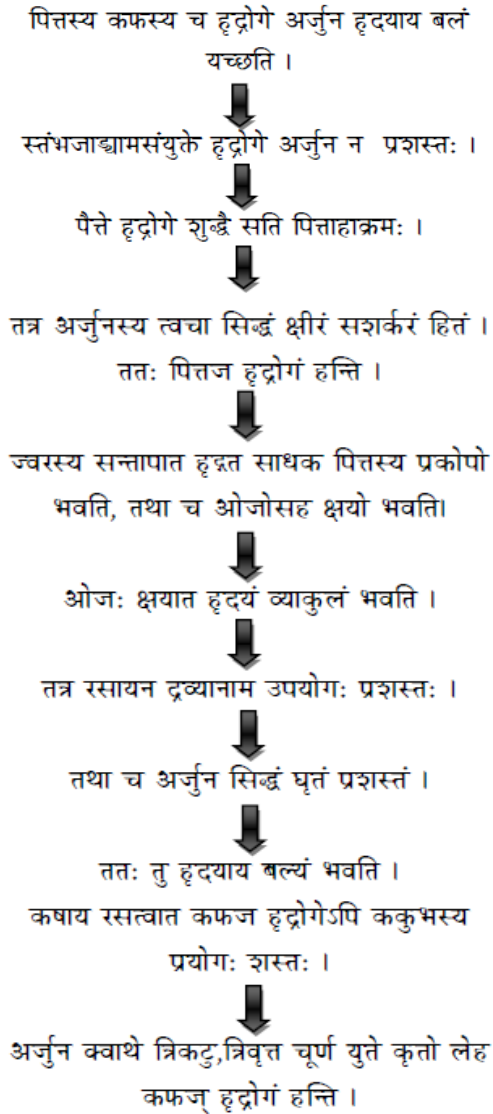
ककुभः शीतलो हृद्यः क्षतक्षयविषास्त्रजित ।

मेदोमेहव्रणान् हन्ति तुवरः कफपित्तहृत् ॥<sup>13</sup>



Fig. Arjun (*Terminalia Arjuna*).

#### A] Mechanism of action of Arjuna on Hrudroga according to Ayurveda:<sup>[14]</sup>



#### B] Mechanism of action of Arjuna [*Terminalia arjuna*] according to Modern:

##### 1] PRIMARY BENEFIT OF TERMINALIA<sup>[15]</sup>

- Improvement of cardiac muscle function and
- Subsequent improved pumping activity of the heart.

##### 2] MECHANISMS OF ACTION

1. Protection of cardiac muscles.<sup>[16]</sup>
2. Regeneration of cardiac tissue.<sup>[16]</sup>
3. Regeneration of cardiac vessels.<sup>[16]</sup>
4. Removal of thrombus.<sup>[16]</sup>
5. Inotropic actions.

1. An experiential study was carried out in 50 Dogs by ligating Coronary artery and *T. arjuna* decoction was administered (25 Dogs in each group). At the end of the study, Histo-pathological study revealed that Arjuna significantly regenerate the cardiac tissue in the infarcted area.
2. After carrying out coronary angiography in Dogs treated with Arjuna it was noticed that new coronary vessels were developed. (GUPTA, 1972)

5. **Inotropic actions:**<sup>[15]</sup> It is thought the saponin glycosides might be responsible for inotropic effects of Terminalia, while the flavonoids and OPCs provide free radical antioxidant activity and vascular strengthening.

##### 3] CLINICAL APPLICATIONS<sup>[15]</sup>

- Angina pectoris & hypotension.
- Congestive Heart Failure.
- Hyperlipidemia.
- Cardiomyopathy / post-myocardial infarction.

##### HERBS ACTING ON BASTI MARMA

###### १] गोक्षुर

गोक्षुरः शीतलः स्वादुर्बलकृद्बस्तिशोधनः ।

मधुरो दीपनो वृष्यः पुष्टिदश्चाश्मरीहरः ॥

प्रमेहश्चासकासार्षः कृच्छहृद्रोगवातनुत् ॥<sup>17</sup>



Fig. Gokshura [*Tribulus terrestris*]



Fig. Gokshura Seed.

**A] Mechanism of action of Gokshura on Mutrakriccha, Mutrashmari, Prameha according to Ayurveda:<sup>[18]</sup>**

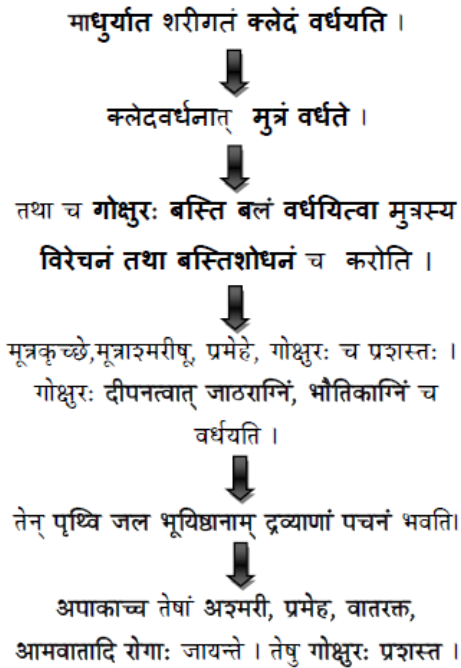


Fig. Haritaki [*Terminalia chebula*].



Fig. Haritaki Fruit.

**B] Aamayika Prayoga of Gokshura**

- गोकशुर क्वाथ साश्रगंधा धात्री संयुतः वातजं मूत्रकृच्छ्रम् हन्ति ।
- गोकशुरचूर्णं माक्षिकं संयुतं अविक्षिरेण सप्ताहम् पिबेत् तदश्रमरी भिनत्ति ।
- गोकशुर क्वाथः कंटकारी संयुतः हृद्रोगं हन्ति ।

**C] Mechanism of action of Gokshura [*Tribulus terrestris*] according to Modern<sup>[19]</sup>**

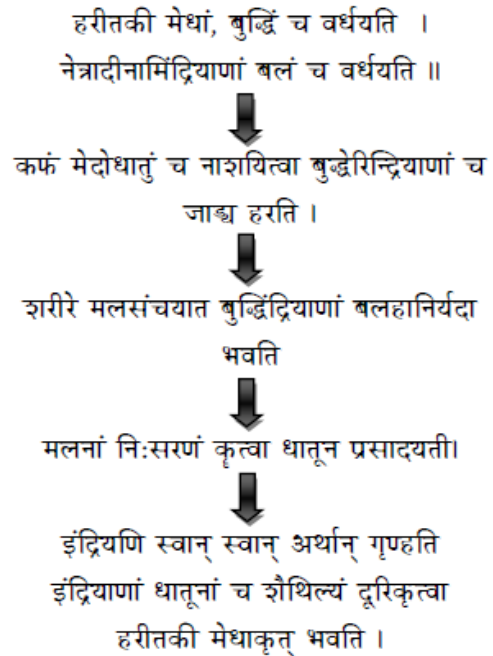
1. *T. terrestris* extract contains high concentration of Mg<sup>2+</sup> and it also increases serum Mg<sup>2+</sup>.
2. Magnesium inhibits calcium oxalate and calcium phosphate stone formation by inhibiting the formation and aggregation of calcium with oxalate and phosphate to form crystals in the urinary tract.

**HERBS ACTING AS A RASAYANA ON TRIVIDH MARMA.**

**1] हरीतकी**

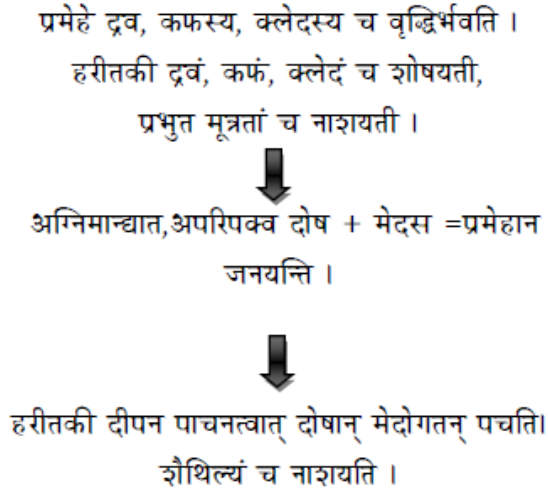
हरीतकी पञ्चरसाऽलवणा तुवरा परम् ।  
 रूक्षोष्णा दीपनी मेध्या स्वादुपाका रसायनी ।  
 गुल्माध्मानतृषाछर्दिहिककाकण्डूहृदामयान् ।  
 अश्रमरीमूत्रकृच्छ्रं च मूत्राघातं च नाशयेत् ॥<sup>20</sup>

**A] Mechanism of action of Haritaki on Shira Marma as a Buddhi-indriya Balaprada<sup>[22]</sup>**



**B] Mechanism of action of Haritaki on Hridya Marma as a Hrudya<sup>[21]</sup>**

हरीतकी उष्ण वीर्यत्वात् वातं शमयति ।  
 हृद्यस्य इन्द्रियानां च शैथिल्यं दूरी करोती,  
 स्रोतोविबन्धं नाशयित्वा रसधातुवहनं सम्यग  
 करोती ।

**C] Mechanism of action of Haritaki on Basti Marma as a Pramehaghna:<sup>[22]</sup>****D] Mechanism of action of Haritaki on Trividha Marma as per Modern Science:<sup>[24]</sup>**

- **Chest Pain** (angina) research shows that taking terminalia by mouth with conventional medications improves symptoms in people experienced in chest pain after a heart attack.
- **CHF** – Some research shows that taking terminalia by mouth with conventional medications for 2 weeks improves symptoms in CHF.
- **BRAIN** - Haritaki- Yogic super brain food.
- Supreme Nectar that illuminates mind.
- Increases energy, intelligence & awareness.
- Increases oxygenation in the brain by 300%.

**DISCUSSION AND CONCLUSION**

1. As we know, the main objective of our study is to look for the medicinal drug as a first drug of choice and hence, the drug like Aamalaki, haritahi, Guduchi, Brahi, Arjuna, Gokshura etc. are used to prevent, cure and to control of disease of vital organs and to maintain their normal state.
2. As we recommended these drug to maintain the normal state of these vital organ, though these drugs are used as per the  
 दुष्यं देष्यं बलं कालं अनलं प्रकृति  
 वयः.....अवस्थाच्य पृथग्विधा ॥
3. Vagbhatacharya has explained the gokshuradi Rasayana Choorana containing Amalaki, Gulavel, Gokshur. This gives „Dirghayu“ to the human beings. All these three drugs are used as a rasayana. Like:

Amalaki = Vayasthapananam.

Gulvel = Vatahara-Sangrahika-deepaniya,  
 “Shonit-Shleshma Vibandha prashananam”.

Gokshura = Mutrakruhhaharanam, Dhatu Balya.

४. भावभ्यसनम् अभ्यास शिलनम् सतत् क्रिया ।

It means that to gain the benefit of these herbs one has to take the drug continuously for desired effect.

5. Hence, as explained above all these drugs and likewise are used to treat the disease of vital organ and to maintain their normal state.

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