



Role of *Udumbara (Ficusracemosa Linn)* In The Management of *Vidradhi* – A Drug Review

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Abstract: Acharya Susruta has extensively discussed the concept of *vidradhi*. He used the word “Sheegra vidahivat” to indicate its immediate burning nature. Prevalence of perianal abscess common in clinical practice. The Materia Medica of Ayurveda gives large information on therapeutically critical herbal products. An abscess is a localized collection of pus and a limited assortment of discharges in a depression shaped from tissues that irresistible bacteria have separated. An abscess is caused when microscopic organisms such as staphylococci or streptococci admittance to strong tissue like a wound on the skin. In traditional drug practices, distinct parts (leaves, stem, root, fruit, seeds, latex or even entire plant) of *Ficus Racemosa Linn.* are used to manage abscess. Its Sanskrit name is *Udumbara*, commonly known as *gular* in Hindi. *Ficus Racemosa Linn.* has confirmed various pharmacological actions like hypoglycemic, hypolipidemic, anti-carcinogenic, antidiuretic, hepatoprotective, anti-ulcer, and antifungal. β -sitosterol and glauanol acetate are the phytoconstituent found in *Ficus Racemosa Linn.* In the present review management of *vidradhi* with *Udumbara (Ficusracemosa Linn)* as *ekal dravya* (mono drug) with the expected mode of action has been explained. Most of the reviews of the *Udumbara (Ficus Racemosa Linn)* drug have not explained its effect on managing *vidradhi* (abscess) with its mode of action. Understanding the mode of action of *Udumbara* at different stages of *shadkriyakala* of *vidradhi* will help better administer the herb and prevent complications. Various Ayurvedic classical texts, Research portals like PUBMED, Google scholar, SCOPUS, DHARA and AYUSH Namaste portal are searched for the data collection: *Udumbara (Ficusracemosa Linn)* being *Kashaya*, *Madhura rasa*, *Sheeta veerya*, *Katu vipaka* and *ruksha guna* acts as *pitta kapha shamaka* and is a drug of choice in this condition.

Keywords: *Udumbara, Ficusracemosa Linn, Vidradhi, Abscess, Monodrug, Mechanism of action*

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I. INTRODUCTION

Amongst the three important Ayurveda classics, *Susruta samhita* contributed a lot towards the surgical and medical management of diseases, including *Vidradi*. Acharya *Susruta* used the word “*Sheegra vidhivat*” to indicate its immediate burning nature.¹ The disease causes painful, red swelling with inflammation. The excessive burning sensation is a major symptom; if untreated, *vidradi* will lead to sinusitis. The abscess is the most widely correlated medical condition with *vidradi*. The abscess is a localized collection of pus and a limited assortment of discharges in a depression shaped from tissues that irresistible bacteria have separated. An abscess is caused when microscopic organisms such as *staphylococci* or *streptococci* admittance to strong tissue like a wound on the skin.¹ According to Ayurveda, there are two major categorizations of *vidradi* (abscess) and are external abscess and internal abscess. An external abscess occurs due to vitiation of *tridosha* and *rakta* in the body. In contrast, internal abscess occurs in the internal organs of the body.¹ *Udumbara* (*Ficus racemosa* Linn) is a moderate-height tree belonging to the *Moraceae* family. The plant is called a cluster fig tree, Indian fig tree or *goolar* (Table -5). This plant is local to Australia, Malaysia, South-East Asia and the Indian Subcontinent. *Ficus racemosa* grows all over India in numerous forests and hilly areas. It's frequently seen across the water stream.² *Ficus racemosa* Linn is often 20 meters tall with aerial roots, whitish brown bark, minutely hairy and grooved leaf, lamina of the leaves are ovate-lanceolate to elliptic-lanceolate, Male flowers are sessile. In contrast, female flowers are sessile or subsessile. Figs are subglobose or pyriform, red when ripe.³ People consider *Udumbara* (*Ficus racemosa* Linn) as sacred to God Dattaguru. *Moraceae* family plants have latex within their vasculatures which helps them to recover from external injury and healing.⁴ In various traditional systems available worldwide, this plant is used as medicine to treat various diseases. Ancient Indian medical systems like Ayurveda, Unani, Siddha and homoeopathy mention this herb. Bark, root, leaf, fruits, and latex are used in this plant for its medicinal purpose⁵ Stem bark of *Udumbara* (*Ficus racemosa* Linn) contains tannin, Saponin, Wax, β - sitosterol, etc. (table -6).⁶ The ethanol extract of the stem bark of this plant showed a wound-healing effect on *Wistar* rats.⁷ Latex contains β - sitosterol, a-amyrin, and cycloartenol as its phytochemical components (table -6).⁸ Latex has its proven effect on boils, haemorrhoids, swelling caused by trauma.⁹ *Udumbara* (*Ficus racemosa* Linn) a *kashya madhura rasa* predominant, *sheeta veerya*, *katu vipaka* plant and its broad range of action is a boon for the management of predominant *pitta* diseases. The mode of action of *Udumbara* (*Ficus racemosa* Linn) in *vidradi* (abscess) is an area where more exploration is needed to give the rationale behind its action. Knowing how the drug is acting on the body and curing a particular disease condition is essential for the physician. Giving the scientific rationale behind the mode of action of Ayurvedic herbs provides global acceptance and understanding of how Ayurvedic medicines are working. Hence in this review article, a sincere attempt to explain the mode of action

2.1.6. Symptoms

of *Udumbara* (*Ficus racemosa* Linn) in the management of abscess (*Vidradhi*) has been explained.

I.I. Aim and objectives

The present work aims to give the rationale behind the action of *Udumbara* (*Ficus racemosa* Linn) in the management of *Vidradhi*. The possible mode of action has been explained with relevant references available in the classical texts of Ayurveda.

2. METHODOLOGY

Data was collected from Ayurvedic texts like *Susruta samhita*, *Charaka samhita*, *Ashtanga hridaya*, *Bhavaprakasha nighantu*, *Raja nighantu* and various research portals like Pubmed, Google scholar, and Scopus and was analyzed and interpreted.

2.1. Review of literature

2.1.1. Disease review Etymology

That which causes a burning sensation (*daha*)

2.1.2. Definition

Severe incendiary, painful, round or level enlarging structure is known as *vidradhi*.¹⁰

2.1.3. Aetiology

There are general and specific etiologies for the occurrence of *vidradhi*.¹¹ Heavy (*Guru*), *asathmya*, incompatible (*virudha*), dry (*Sushka*), *Samsrushta bhojana*, *Vidahi anna sevana*, excessive physical work (*ati vyayama*), excessive sexual indulgence (*ati vyavaya*), Withholding natural urges (*vegadharana*) are the reasons for *vidradhi* formation.

2.1.4. Pathophysiology:

Vitiation of *doshas* and *rakta* happens in the body due to indulgence in etiological factors. This will lead to vitiation of *twacha*, *mamsa*, *meda*, *asthi*, *snayu*, *kandara* and cause growth with pain and inflammation.

2.1.5. Types of *Vidradhi*

Based on *doshik* predominance *vidradhi* has five types viz. *Vataja*, *Pittaja*, *Kaphaja*, *Sannipathaja* and *Raktaj*. According to the site there are descriptions of *External vidradhi* and *internal vidradhi*. *External vidradhi* are six in number according to *dosha* vitiation in *bahya rogamarga*. *Internal vidradhi* are classified according to their location in *abhyantara* and *madhyama roga marga*. They are *Guda*(Rectum), *Basti* (Bladder), *Nabhi* (Umbilicus), *Vankshana*, *Vrikka*(Kidney), *Pleeha*(spleen), *Hridaya*(Heart), *Yakrit*(Liver), *Kloma*(Pancreas). As it is mentioned in table-I the symptoms of *vidradhi* differs according to its *dosha* predominance. The symptom of *vidradhi* also varies according to its site of appearance (Table – 2)

Table I: Symptoms according to *dosha* predominance

Dosha predominance	Symptoms
<i>Vataja vidradhi</i> .	<i>Krishna</i> , <i>Aruna varna</i> , <i>Parusha</i> , <i>Ati vedana</i> , <i>Chira uthana paaka</i> , <i>Tanu srava</i> .
<i>Pittaja vidradhi</i> .	<i>Shyava</i> , <i>rakta</i> , or <i>tamra varna</i> , <i>pakva udumbara samkasha</i> , <i>Alpa vedana</i> , <i>Kshipra uttana prapaka</i> , <i>Jwara</i> , <i>Daha</i> , <i>Trishna</i> , <i>Moha</i> , <i>Peeta vrana srava</i> .

Kaphaja vidradhi.	Sharava sadrusha, Pandu kandu yukta, Sheeta, Sthabdha, Alpa vedana,, Chiro uthana prapaka, Shweta varna srava.
Sannipataja vidradhi.	Ghatala, Vishama, Mahan, Nana varna srava.
Kshataja vidradhi.	Similar to pittaja vidradhi, Peeta rakta srava
Raktaja vidradhi.	Similar to pittaja vidradhi, Krishna spota, avruta, Teevra daha and ruja, Raktaja srava.

Table I illustrates that according to dosha there are four main types of vidradhi. *Vataja vidradhi* has symptoms like black or reddish colour, dryness, severe pain, and mild exudation. *Pittaja vidradhi* has a predominance of coppery red colour, or ripened ficus fruit colour, with comparatively less pain but a

burning sensation. *Kaphaja vidradhi*, the patient will experience itching, coldness over the area affected, and less pain. *Kahataja* and *Raktaja vidradhi* has similar symptoms of *pittaja vidradhi*. *Peeta rakta srava* is seen in *Kshataja vidradhi*. There as so much burning sensation and bleeding is seen in *Raktaja vidradhi*

Table 2: Symptoms according to site of Vidradhi

Site of Vidradhi	Symptoms
Guda	Vata nirodha, Atopa, Samkshobha
Basti	Krichra mutrata, Alpa mutrata
Nabhi	Hikka, Atopa, Maruta prakopa in kukshi
Vankshana	Kagraha, Teevra ruja, in prushta
Vrikka	Parshwa sankocha
Pleeha	Uchwasa avarodha
Hridaya	Teevra ruja, Sarvanga pragraha
Yakrit	Trishna ,shwasa
Kloma	Pipasa

2.1.7. Treatment

2.1.8. General aspects

Acharya susruta explained six upakramas for managing inflammation (shopha) which can be adopted for managing vidradhi according to its various stages like *Ama*, *pachyamana* and *pakwa*.

- 1) *Vimlapanam* – Pressure application with fingers.
- 2) *Avasechanam* – Bloodletting
- 3) *Upanaha*– Poultice application
- 4) *Patana kriya* – Operative procedure
- 5) *Shodhana* – Cleaning the wound by removing the slough
- 6) *Ropana* – Use of medicine which enhances healing
- 7) *Vaikrutapaham* - To restore the normal pigmentation of the skin.

Vimlapanam and *Avaseschanam* are done in the *ama avastha*. *Upanaha* has to be done in the *pachyamana avastha*. At *pakwavastha*, *Patana kriya* is advised. In *vrana avstha* one has to perform *shodhana*, *ropana* and *vaikrutapaha chikitsa*.

2.1.9. Drug review

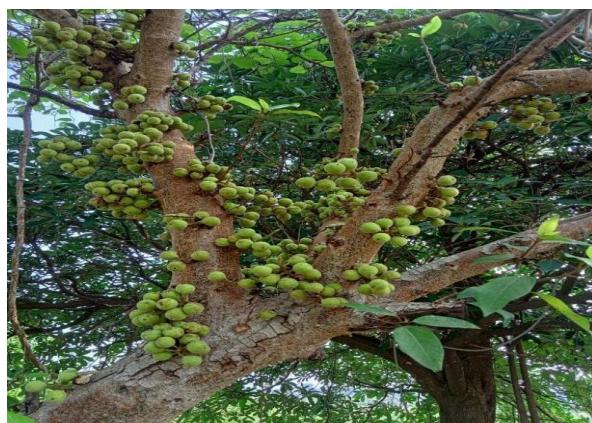


Fig 1 : Udumbara (*Ficus racemosa* Linn) belongs to the Moraceae family (table -3). It has synonyms like *Janthuphala*, *Yajnanga*, *Sadaphala*, *Krimiphala*, *Sweta valkala*, *Ksheeravruksh*, *Hemadughda*, *Sheeta valkala*

Table 3: Taxonomical classifications of *Ficus racemosa* Linn

Kingdom	Plantae
Division	Magnolioohyta
Class	Magnolipsida
Order	Urticles
Family	Moraceae
Genus	<i>Ficus</i>
Species	<i>racemosa</i>

2.1.10. Ayurvedic Properties

Table 4: Rasapanchaka

Rasa	Kashaya, Madhura
Guna	Guru, Ruksha
Veerya	Sheeta
Vipaka	Katu

Karma: *Vrana shodhana, Vrana ropana, Varnya, Bhagna sandhanakrit*

Indications: *Switra kushta, Vrana, Rakta vikara like datha moorcha rajatapitta etc, Kanda bhagna, Yoni roga, Vyanga, Hikka, Prameha pidaka, Mootra kruchra*

Table 5: Vernacular names of *Ficus racemosa* Linn

Hindi	Gular,dumar,dimere,fagura,gular,phagoora,rumbal
Kannada	Atti mara, arti,attee,
Telugu	Attimaramu,athi,atti,boda
Tamil	Anai,atti,malaiyin munivan
Urdu	Dumar
Bengali	Dumur,udumbara
Gujarati	Goolar,umbaro
Malayalam	Aththi,
Marathi	Udumbar, umbar, atti, gular

Table 6 : Phytoconstituents of *Ficus racemosa* Linn¹²

Stem bark	Wax, Tannin, Saponin, gluconol acetate, leucocyanidin, β sitosterol.
Latex	β sitosterol, α -amyrin, esters, cycloartenol, euphol, euphorbinol, palmitic acid, taraxerol
Leaf	Sterols, Flavanoids and tannins, triterpenoids, alkaloids
Root	Euphorbol, Cycloartenol, hexacosanate, taraxerone.

2.1.11. Description in Ayurveda

Bhavaprakasha Nighantu - Vataadi varga¹³, Dhanwanthari Nighantu - Amradi varga¹⁴

Kaiyyadeva Nighantu - Aushadavarga¹⁵, Madana pala Nighantu - Vataadi varga¹⁶

Priya Nighantu - Haritakyadivarga¹⁷, Raja Nighantu - Aamradi varga¹⁸, Nighnati Adarsha - Vataadi varga¹⁹

Udumbara is extensively discussed in Vedic literature. *Rigveda, Atharva veda* mentions the plant. ²⁰*Charaka samhita, Susruta samhita* and *Ashtanga hridaya* mention the use of *udumbara* in various *pitaja* conditions. The classical references have a marvellous relation between the *vidradi* associated with *Lakshana* and their management with *Udumbara prayoga*.

Table 7: *Udumbara* references from *brihatraye* with its treatment of *vidradhi*

References from <i>Brihatraye</i> of <i>Udumbara</i>	Its relevance in <i>Vidradhi chikitsa</i>
<i>Mutrasangrahaniya mahakashaya gana²¹</i>	Difficulty in urination (<i>Krichra mutrata</i>) and Oliguria(<i>Alpa mutrata</i>)are symptoms of an abscess situated in the urinary bladder (<i>basti ashrita atarh vidradhi</i> .)
<i>Udumbara lepa – in dahaprashamana²²</i>	Burning sensation (<i>Daha</i>), is a common symptom in <i>vidradhi</i>

<i>Twak of udumbara is used in yagnya</i> ²³	Discolouration of the local area after the healing is an area to be taken care treatment of <i>vidradhi</i>
<i>Kashaya skandha dravya</i> ²⁴	<i>Shodhana, ropana, property of kashaya rasa</i> , is needed to manage the wound formed out of a <i>vidradhi</i> .
<i>Chandanadi taila mentioned in Jwara chikitsa has udumbara as an ingredient.</i> ²⁵	<i>Fever (Jwara)</i> is a symptom seen in <i>pittaja vidradhi</i>
<i>Raktapitta chikitsa udumbara phala prayoga is mentioned</i> ²⁶	As <i>raktapitta</i> and <i>vidradhi</i> are the predominant <i>pitta dosha</i> vitiation, they can be used in <i>vidradhi</i> management.
<i>Kirata tiktadi churna in raktapitta chikitsa udumbara is mentioned</i> ²⁷	<i>Rakta pitta</i> and <i>vidradhi</i> have many common symptoms due to <i>pitta</i> vitiation in both conditions.
<i>Udumbara patra sidha taila in raktapitta</i> ²⁸	<i>Pittaja vidradhi</i> condition has the most similarity with <i>raktapitta</i> disease.
<i>Pradeha and parisheka with udumbara in Raktapitta chikitsa</i> ²⁹	<i>Pittashamana</i> is needed in <i>vidradi</i> , as well as <i>rakta pitta</i>
<i>Raktaja arshas udumbara is mentioned for parisechana</i> ³⁰ .	<i>Raktaja vidradhi</i> , <i>pittaja vidradhi</i> has the same <i>dosha</i> vitiation as of <i>Piles (raktaja arshas)</i> . Hence <i>udumbara</i> can be used in <i>vidradhi</i> management.
<i>Udumbara kalka in Atyagni chikitsa</i> ³¹	<i>Atyagni</i> is the condition where there is increased <i>pitta</i> . Hence this can be utilized in the management of <i>vidradi</i> .
<i>Udumbara pradeha in visarpa chikitsa</i> ³²	Burning sensation (<i>Daha</i>), pain (<i>vedana</i>), Fainting (<i>moha</i>) are common symptoms of <i>visarpa</i> and <i>vidradi</i> due to <i>pitta</i> predominance in the conditions.
<i>Nyagrodadi pralepa in visarpa chikitsa</i> ³³	<i>Nyagrodadi</i> has <i>udumbara</i> as its content, and it is useful as <i>pittahara</i>
<i>Vatadi pralepa in dwivranceya chikitsa</i> ³⁴	<i>Vidradi</i> later turns into a wound. Hence wound management has to be adopted.
<i>Ingredient in Twak sanjanana yoga</i> ³⁵	Attaining proper skin colour (<i>Savarneekarana</i>) is a part of wound management. Hence, medicine that can improve the skin's quality can be used for this purpose.
<i>Vata rakta chikitsa , Dahahara lepa</i> ³⁶	Burning sensation (<i>Daha</i>) is a predominant symptom in <i>pittaja vidradhi</i> . Therefore, <i>daha hara lepa</i> made out of <i>udumbara</i> can be used.
<i>Lepa of udumbara in pittaja arduda chikitsa</i> ³⁷	<i>Pitta</i> management is the primary aim in the management of <i>pittaja arbuda</i> , for treatment of <i>vidradhi</i> also, one can use <i>udumbara</i> .
<i>In yonija ati rakta srava udumbara phala is used</i> ³⁸	<i>Rakta srava</i> is seen as <i>vrana</i> ; as the <i>vidradi</i> turns into a wound, the drugs used in the management of haemorrhage be used in the treatment of <i>vidradhi</i> .
<i>In rakta pitta chikitsa, Sheeta kashaya prayoga is indicated</i> ³⁹	<i>Sheeta kashaya</i> <i>prayoga</i> is an excellent method to control excessive <i>pitta</i> . Hence it can be used in <i>vidradhi</i> also.
<i>Sarva trishna treatment Udumbara kwatha</i> ⁴⁰	Thirst seen in <i>Vidradhi</i> situated in the liver and <i>pittaja vidradhi</i> (<i>Yakrit ashrita vidradhi</i>) is its key symptom. Hence management thirst can be adopted in the respective <i>vidradi</i> .
<i>Udumbara bhasma is used in the management of Hikka roga</i> ⁴¹	In an abscess situated near umbilicus the major symptom is <i>hikka</i> . <i>Udumbara bhasma</i> can be used in <i>Swatantra</i> or <i>paratantra hikka roga</i>
<i>In dhoopama dravya</i> ⁴²	Fumigation plays a key role in <i>rakshoghma karma</i> for the management of wounds due to its <i>sokshma guna</i> . Fumigation with <i>udumbara</i> can be a treatment for <i>vidradhi</i> .
<i>Shatadhouta grita</i> ⁴³	<i>Shatadhouta</i> <i>ghrita</i> is <i>pitta hara</i> . It can be used as an external treatment for <i>vidradi</i>
<i>Ghrita of udumbara in kasa chikitsa is mentioned</i> ⁴⁴	Difficulty in breathing is asymptomof abscess situated in the liver and spleen.
<i>Pittaja Trishna chikitsa udumbara swarasa is indicated</i> ⁴⁵	Thirst seen in abscess situated in the liver and <i>pittaja vidradhi</i> . Hence <i>vidradhi</i> patient having thirst can be cured with fresh juice of <i>udumbara</i>
<i>Udumbara phala</i> is mentioned in <i>chikitsa</i> of <i>shoola</i> and <i>daha</i> ⁴⁶	Pain and burning sensations are cardinal features of <i>vidradhi</i> . The management can be done with the use of <i>udumbara</i>
<i>Udumbara</i> used as <i>pradeha</i> in <i>vrana chikitsa</i> ⁴⁷	As the wound is the later stage of the prognosis of <i>vidradhi</i> , the <i>pradeha</i> out of <i>udumbara</i> can be used in <i>vidradi</i> management.
<i>In Vrana churna udumbara is used</i> ⁴⁷	Wound management can be achieved by applying powder of <i>udumbara</i> over the site.

3. DISCUSSION

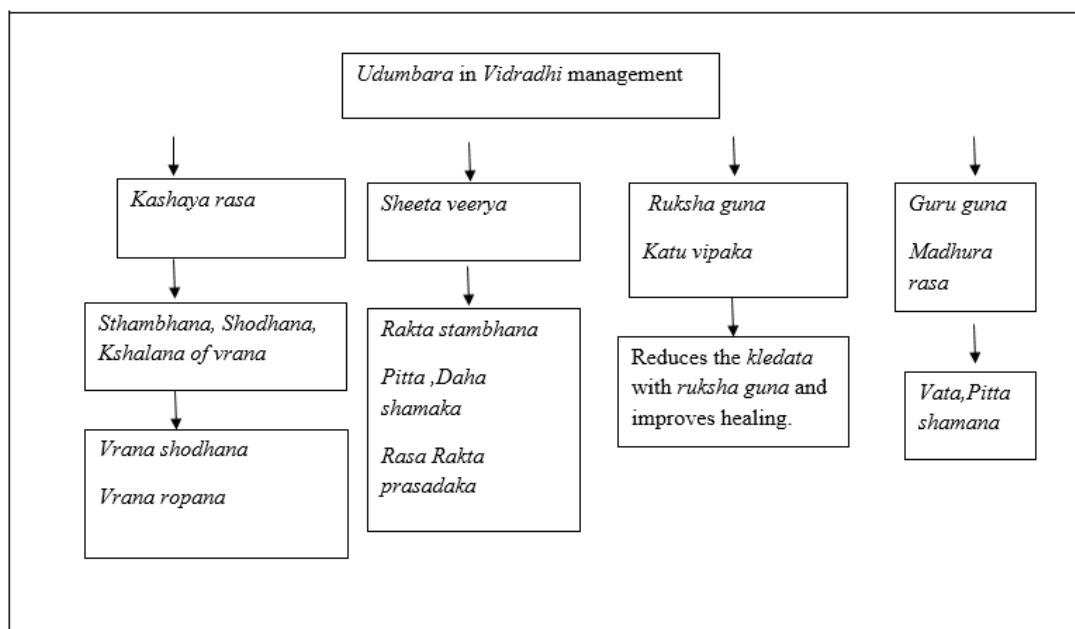


Fig 2: Mechanism of action of udumbara (*Ficus racemosa* Linn) in vidradhi

3.1. Properties of Kashaya rasa

Kashaya rasa (Astringent taste) is among the six tastes mentioned in Ayurveda. According to *shabdakalpadruma*, the word *kashaya* has many meanings. The root term is *Kasa* or *Kasati*, which means to scrape, rub, kill, or injure. *Sheeta*(cold) and *guruguna* (heaviness)of *kashaya rasa* pacify *pitta dosha* and *rukshaguna* (dryness) controls *kapha*. It reduces *shareeragata kleda* because of its *rukshaguna* and *vishada guna*. This reduces the *vrana kleda*, *snigdhata* and *picchilata*. The *Kshalana* property of *vishada guna* helps make the wound devoid of discharges. *Sandhana* is a property of *kashaya rasa*. The *dhatusandhana* (Tissue repair) action will contribute to healthy granulation and collagen formation at the wound site. Cleansing (*Shodhana*)property does the *rasa*, *rakta* *dhatusandhana*. The healing process can accelerate if a wound is treated with *kashaya rasa* predominant drugs. *Twak prasadana*(bringing superior quality to the skin) is achieved by stimulating *bhrajaka pitta* by removing excessive *snigdhata*.⁴⁸ *Vrana pidana* (Drains the wound collection), *Vrana ropana* (Does the healing of the wound), *Vrana soshana* (Dries up the wound by taking its watery contents), *Vrana achooshana*(Sucks out the most out of the wound) will be taken care by *Kashaya rasa* predominant drugs.

3.2. Mechanism of action according to Ayurveda

Management of Vidradhi varies according to its different pathophysiological stages called *shatkriyakala*. The qualities of the etiological factors increase the respective quality of *dosha* in the *sanchaya* (accumulation) stage. Hence at this stage, management is easier. It understands the disease at its *dosha* level in the *Prakopa*, and *prasara* stages may help in planning proper treatment. Involvement of various *dhatus* is extensive in the *sthana samsraya* and later stages of *shad kriya kala*.⁴⁹

3.3. At the level of guna

The disease manifests due to indulgence in inappropriate diet and behaviour, leading to increased *dosha* qualities in the body. These will result in the accumulation of that *dosha*. The

increased *doshas*, if left untreated, may cause the manifestation of the six stages of the disease. Therefore, the treatment must be adapted in the *Sachayaya*, *Prasara*, *Sthanasamsrya avastha* to avoid complications and get a good prognosis. Intake of irritant food (*Vidahi anna sevan*) increases *tikshna*, *ushna* and *drava guna*. Excessive physical work (*Ati vyayama*) and excessive sexual indulgence (*Ati vyavaya*) lead to increased *chala* and *laghu guna*. Hence *vidhradi* manifests due to the increased *ushna*, *tikshna*, *chala* and *drava guna*. *Udumbara* has *sheeta veerya*, *manda*, *guru* and *ruksha guna* which are opposite to the qualities increased due to the etiological factors of *Vidradhi*. Sweet taste (*Madhura rasa*) can reduce the (hotness) *ushna* and *tikshna guna*, as it can reduce thirst and burning sensation.

3.4. At the level of dosha

Prodromal symptoms give an idea about the accumulated *dosha* inside the body. Selection of appropriate drugs may be easy once a physician can identify the state of increased *dosha*. *Vidradhi* is a condition where the *tridoshas* get vitiated with predominance in *pittadosha*. *Sheeta veerya*, *Kashaya madhura rasa* and *guru guna* of *Udumbara* reduce the vitiated *pitta*. *Vata dosha* gets pacified due to *madhurarasa* and *guruguna*. *Kashaya rasa*, *Katu vipaka* and *ruksha guna*. Help in pacifying *kapha dosha*.

3.5. At the level of dhatus

Twak (*Rasa*), *Rakta*, *Mamsa*, and *Meda* are the major *dhatus* affected in the general condition of *vidradhi*. *Twak*, closely related to *rasadhatu* and the seat of *Brajakapitta*, gets vitiated by improper diet and behaviour. *Udumbara* is *twachya* due to its *Rasapanchakaand* purifies *pitta* and enhances skin quality. Swelling with pus collection in *Vidradhi* is due to accumulated vitiated *kapha* in tissue. *Udumbara* being *kashaya* and *ruksha* pacifies *kapha* and thereby reduces pus and swelling. *Pitta dosha* has a close relation with *Rakta dhatus*. Hence vitiation of *pitta* ultimately causes vitiation of *raktadhatu*. *Udumbara* has *Kashaya*, *madhurarasa* and *sheeta veerya*. Therefore, it pacifies *pitta* and purifies *raktadhatu*. In *vidradhi* there is a vitiation of *Mamsa dhatus* and accumulation of *Ama*. *Kashayarasa* and *kativipaka* of *Udumbara* will do *Amapachana* and improve the

quality of Mamsa *dhatu*. *Medo dhatu* vitiation leads to excessive pus formation. *Kashaya rasa* has *Ropana*, and *Lekhana* properties by which excessive *medas* can be reduced along with pus.

3.6. Research aspects of properties of *Udumbara* (*Ficus racemosa* Linn)

Phytopharmacology of *Udumbara* reveals that it contains tannin, saponin, steroids, alkaloids, lupeol, ceral behenate, etc⁵⁰. Tannins are natural phenolic compounds with antibacterial effects. Researchers showed the effect of tannin on delaying the growth performance of intestinal microorganisms in piglets⁵¹. The latex of *Udumbara* (*Ficus racemosa* Linn) is useful in managing *vidradi*. Many laboratory research works are happening to understand the phytochemical and pharmacological action of the latex of *udumbara*. Moraceae, the family of *Ficus racemosa* Linn family M Latex of plants, has been detected with protease inhibitors. Caseinolytic Protease P enzyme inhibitors exist in the latex of plants included in the Moraceae family. ClpP Enzymes are responsible for cell homeostasis and virulence of bacteria like *Staphylococcus aureus*, *Listeria monocytogenes* etc. ClpP enzyme inhibitors destroy the bacterial cell's growth and give antibacterial effects.⁵² In another study on the stem bark, *Ficus racemosa* Linn found that ethanolic extract has significant anti-inflammatory action comparable with diclofenac. This promises the effect of the plant in infection management. There is a large scope in the determination, isolation, and fractionation of the exact constituents that are responsible for this property.⁵³

3.7. Limitations

The study does not include any human *Udumbara* (*Ficus racemosa* Linn) trial on patients with *Vidradhi* (Abscess).

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4. CONCLUSION

Treatment of *vidradhi* is challenging for any physician due to its complications like the formation of the Sinus (*Nadi Vrana*) and Fistula(*Bhagandhara*). In Ayurveda, various single herbs have been mentioned for managing different clinical conditions according to the needed pharmacological action. Antimicrobial properties (*Krimighna*), wound healing (*Vranaropana*), and curing skin disease (*kushta hara*) are some examples. *Rasa panchaka* of *Udumbara* (*Ficus racemosa* Linn) helps properly manage *vidradhi*. This also contributes to understanding its mode of action. *Sheeta veerya*, *Kashaya rasa*, *Ruksha guna* and *katu vipaka* of *udumbara* do the *pitta shamana*, wound healing, *kapha shamana*. Modern research shows that the presence of ClpP enzyme inhibitors in the latex of plants under the Moraceae family supports the Ayurvedic literature's data. Other studies also revealed significant anti-inflammatory action of ethanolic extract of stem bark of *Udumbara* being a potent anti-inflammatory drug. Finding the rationale behind the action of *Udumbara* (*Ficus racemosa* Linn) in the management of *vidradhi* has been done in this review, along with the integration of modern phytochemical properties of the plant. Furthermore, studies to analyze the phytochemicals and their action on abscess have to be carried out.

5. AUTHORS CONTRIBUTION STATEMENT

Dr Nincy B S conceptualized and designed the manuscript after an extensive literature search. Dr Rajkumar Gupta prepared the original draft, and Dr Bharat Rathi and Dr Pramod Khobragade provided valuable inputs in designing the manuscript.

6. CONFLICT OF INTEREST

Conflict of interest declared none

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