

INTERNATIONAL AYURVEDIC MEDICAL JOURNAL







Review Article ISSN: 2320 5091 **Impact Factor: 5.34**

EXISTING EMERGENCY MANAGEMENT USED FOR VISARPA DISEASE

Kendre Manchak¹, Jaybhaye Sulakshana²

¹Professor, Department of Kayachikitsa, ²Professor, Department of Swasthavritta S.G. Patel Ayurveda Hospital and Research Center, New Vallabha Vidya Nagar, Anand, Gujarat - 388121, India

Corresponding Author: vdkendre2007@rediffmail.com

https://doi.org/10.46607/iamj2908092020

(Published online: September 2020)

Open Access

© International Ayurvedic Medical Journal, India 2020

Article Received: 17/08/2020 - Peer Reviewed: 26/08/2020 - Accepted for Publication: 31/08/2020



ABSTRACT

Emergency management in Visarpa is most challenging. The aim of this study is to review the existing Critical care for Visarpa from basic Ayurveda classics as well as online. In this review article, after evaluation of emergency care from brihatrayai as well as laghutrai and available relevant 21 articles regarding Visarpa chikitsa, we discussed the need of development of Ayurveda diagnostic as well as intensive care units in present era. It is found that emergency treatment is not available to the satisfaction in Ayurveda literature. Therefore, possible strategy regarding emergency care research for this critical disease is provided which is useful for *Ayurveda* researchers.

Key words: Visarpa, Parisarpa, erysipelas, gangrene, Septicaemia, Sepsis, Septic shock, necrotizing-fasciitis, B cell Lymphoma of skin, fulminant spreading skin infections.

INTRODUCTION

The Visarpa emergency management is concerning global Ayurveda practitioner's problem. Interpretation of this disease with Allopathic disorders is very confusing to scholars. It is need of time to develop emergency care for this disease.

Visarpa stands for 'sarpan' means 'spreading'. Vividham Sarpati Iti Adha Urdhva Tiryaka Tathāspotha Shophādibhih Prasarati Iti Visarpa. It means Inflammatory, erythematous, pustular, glandular etc. lesions which spread rapidly in localised or widespread pattern. [1] The term Visarpa has two parts viz., 'vi' and 'sarpa', 'vi' stands for 'vividha' meaning 'various' (ways) and 'sarpa' means spread. This aliment is also called 'parisarpa'. The prefix 'pari' stands for 'paritah' or 'sarvatah' meaning all over. The disease which spreads all over rapidly is called Visarpa. [2] In the beginning of discussion on Visarpa with Punarvasu Atreyaḥ, Agnivesa queries, 'O Lord, I found acute emergency disease which spreads with the virulence of snake venom and if not treated promptly leads to death, we are in great need of clarification'. [1] This indicates

In curable *Visarpa*, *shodhan* therapy has given prime importance because *Rakta*, *Kleda* and *dosa* vitiation is at higher level. Its general treatment is described by considering *Rakta* and *Pitta* vitiation.

that it is acute spreading emergency disease and needs

After evaluation of all basic *Ayurveda* literature as well as research articles available online, it is found that after *Samhita* period all have followed *Charka* and *Sushrut's* description of *Visarpa* except additional few medications and research work is not carried out to the satisfaction.

Aim and objective

intensive care.

The aim of this study is to review the existing emergency management for *Visarpa*. Objective is to collect all basic information from Brihatrayi and Laghutrayi as well as from articles available online. Evaluation of valuable material and assessment of existing emergency management as well as its utility in actual practice.

Material and Methods

doi: 10.46607/iamj.2908092020

In this review article, the literature search is involved a manual search from Ayurveda basic classics. In addition, we performed a computerized data base search to identify relevant articles. We searched published articles from Google search and relevant information to meet the objectives of this study. The keywords used in the search were *Visarpa*, *Parisarpa*, erysipelas, gangrene, septicaemia, sepsis, septic shock, necrotizing-fasciitis, B cell Lymphoma of skin, fulminant spreading skin infections. After data extraction, irrelevant matter was excluded similarly only relevant matter is included and used in this review study wherever applicable.

Overview of literature related to *Visarpa Visarpa Hetu*

The chapter 'Visarpa chikitsa' follows that of 'Chardi chikitsa' because suppression of natural urge chardi (vomiting) as well as Chardi disease are to be considered as causative factors for Rakta dusti (vitiation of blood) leading to Visarpa. This indicates that Rakta vitiating factors and vitiation of Rakta is an important basic underlying phenomenon prior to the Visarpa. [3] General etiological factors of Vispara are diet and lifestyle related, injury, poisons, toxins, burns etc., some of these cause vitiations of dosha and khavaigunya (disease prone condition) in dhatu and some cause direct vitiation of dosha and dhatu leading to Visarpa. It shows that favourable condition for disease phenomenon or infection occurs first.

Allopath point of view, *Visarpa* like condition is generally caused by infection or immune reaction. Mode of infection may be uncooked food, contaminated food, water etc. but *Punarvasu Atreyaḥ* has given various causative factors which are not directly considered in Allopath.

As a treatment principle, hetu should be taken into consideration during management. In treatment plan this concept of favourable body environment should be considered. Change in internal body atmosphere is possible by *shodhana therapy* and medications.

Vidhi Samprapti

On location basis *Visarpa* is classified into *Bahih-srita* (externally situated), *Anthah-srita* (internally situated) and

Ubhayasamsrita (all over situated). It is also classified into Vatic, Paittik, Slaismik, Agni visarpa, Kardam visarpa,

Granthi visarpa and Sannipatik on dosha basis. Sushruta has described one additional Kshataja visarpa. [4]

Diagnosis, prognosis and treatments are linked to the disease classification hence *pranabhisar* physician (experienced in life saving treatments) should apply it appropriately during *Visarpa* management.

Samprapti

3. Ubhayasamsrita visarpa (situated in both external as well as internal pathways and is to be known more and more serious consecutively)

2. Abhyantarsrita visarpa (internally situated, pathogenesis in internal organs and dhatu) OR

General etiological factors of visarpa are diet and life style related, injury, poisons, toxins, burns, excess intake of salt, sour, pungent, hot articles etc.



vitiation of dosha and khavaigunya (disease prone condition) in dhatu or some cause direct vitiation of dosha and dhatu.

The provoked *vatadi* dosha affect the susceptible body elements such as *rakta*, lasika etc. and spread in the body.

1.Bahishrita visarpa (externally situated, pathogenesis in rasa and rakta dhatu) OR

Seven elements are involved in the pathogenesis of *Visarpa* viz., *Rakta* (blood) *Lasika* (lymph), *Twaka* (skin), *Mamsa* (flesh), *Vata*, *Pitta* and *Kapha*. Same elements are considered for *Kustha* (various skin disorders) but clinical presentation of both the diseases is different because every disease is having its own nature. As *Kustha* is chronic in nature and *Visarpa* is acute and fatal therefore spreading *Kustha* should not be interpreted as *Visarpa*.

Shodhana therapy helps to normalise the *samprapti* in curable condition of *Visarpa*.

Visarpa Lakshana

Antahsrita visarpa (Pic.1) involves internal vitals leading to impaired consciousness, impaired circulation, excessive thirst, impaired natural urges and instantaneous reduction in digestive as well as immune power of body and is fatal. [5] This point towards septicaemia like condition.

Bahihsrita visarpa^(Pic.2) involves exterior part i.e. Skin, flesh, etc. of the body having symptoms like inflammatory oedema, blisters, ulcers, fever, pain etc. and is curable. This indicates severe spreading skin infection

doi: 10.46607/iamj.2908092020

involving adjacent structures like erysipelas, gangrene, cellulitis, herpes etc.

Ubhayasamsrita visarpa is a combine manifestation of *Antahsrita* and *Bahihsrita visarpa* spreading all over the body and is fatal; ^[6] this shows severe septicaemia or septicaemic shock like condition.

Here general diagnostic guideline is given for *Antahsrita visarpa* and *Bahihsrita visarpa*, but prompt diagnosis requires most experienced physician in critical care managements and advance technology.

Vatic, (Pic.3) Paittik (Pic.4) and Kaphaja (Pic.5)

Comparison of these *Visarpa* with Allopathic entity is controversial hence *dosha* predominant signs and symptoms should be considered for differential diagnosis. Clinical presentation of these entities resembles with severe spreading ailments erysipelas, gangrene, herpes, burns etc.

Agni visarpa (Pic.6)

Agni visarpa is a serious illness resembles with various ailments like gas gangrene, erysipelas, cellulites etc. which may lead to septicaemia like condition. Clostridium responsible for gas gangrene is having around 100

species. If we go through the symptoms of these species, one can find the infection spreading in 3 ways as mentioned by Acharya. Further their symptoms are identical with Sannipatik, Agni and Kardam visarpa. It is not appropriate to label *Agnivsarpa* as a particular one ailment. Due to drug and technology evolution this disease may be cured with appropriate early management in intensive care unit.

Kardam visarpa (Pic.7)

It is called Kardam visarpa because the affected part appears like Kardam (mud). The clinical picture described here is *Kapha* and *Pitta* predominant and often spreads to Amamshaya as it is seat of Kapha as well as *Pitta*. [7]

It is grave necrotizing illness identical with necrotizing fasciitis, gangrene and manifested with complete symptoms becomes incurable. If it is manifested with minimal symptoms may be cured by cautious crucial management.

Granthi visarpa (Pic.8)

It is not appropriate to label Granthi visarpa as a particular one ailment. B cell lymphoma, generalised lymph adenopathy due to severe ailment etc. are identical with it. Advance technology may be used to confirm the associated ailment in it for appropriate treatment approach. Kapha and Vata predominant condition is difficult to cure. In patient having Rakta [8], Kapha and Pitta vitiation along with complications is rejectable

Sannipataja visarpa (Pic.9)

doi: 10.46607/iamj.2908092020

The Visarpa which is caused by all etiological factors, manifesting with all signs and symptoms, spreads in all body elements very rapidly and great disastrous is known as Sannipataja visarpa and is not treatable. Its clinical picture described here is a very grave manifestation and is *Ubhaya-samsrita*. This resembles to very severe emergence of sepsis, gangrenes etc. and is not treatable. Sarvadhatvanusaritvam signify that it involves all rasadi dhatu's [9]

It is very difficult to label Sannipatik visarpa as a single ailment. It is not treatable as per *Punarvasu Atreyah*, even though researchers can try to do research in advance intensive care unit after consent.

Sadhyasadhyatva

Prognosis of Bahih-srita visarpa caused by Vata, Pitta and Kapha is good if treated promptly. Agni visarpa and Kardam visarpa may be cured with appropriate timely management otherwise negligence leads to death of the patient. Granthi visarpa should be treated before complication otherwise becomes incurable. Sannipatic visarpa is a severe manifestation of the disease leading to death, [10] this indicates that majority of Visarpa cases are having bad prognosis as per experience of Punarvasu Atreyah.

Externally, internally and externally as well as internally situated Visarpa is to be known more and more serious successively. Externally spread is curable, internally situated is very serious and difficult to cure and externally as well as internally spread is incurable.

Here prognosis assessment of *Visarpa* on location basis and spreading path of provoked dosha [11] is given. Before treatment of any acute disorder prognostic assessment is very important because success or unsuccess of treatment and fame of physician is concerned with. [12] Visarpa is acute and fatal in nature hence experienced physician in life saving management should explain about the prognosis to the relatives and ask for consent before treatment. Generally, patients having very bad prognosis should be convinced for no treatment or referred to higher centre.

Chikitsa

Shodhan therapy

In curable Visarpa, shodhan (Vamana, Virechana, Basti, Nasya and Raktamokshana) therapy has given prime importance because Rakta, Kleda and dosha vitiation is at higher level.

Visarpa never occurs without association of vitiated rakta and pitta. Hence common treatment principle is rakta and pitta pacification. Specific treatments are described as per the *dosha* involvement.

Shodhana therapy is described for curable Visarpa and its maximum cases are incurable as per experience of *Punarvasu*. This is challenge to the researchers to apply shodhana therapy in incurable emergency cases along with lifesaving management to cure the incurable ones.

Lepa, pralepadi therapy

When the inside of the body is cleansed and morbid *doshas* remains in the skin and flesh, or *dosha* morbidity is little, the external application is indicated.

Important principle for external therapy is *rakta-pitta prashamana* (pacification), *rakta prasadana* (purification), *vrana shodhana* (cleansing) and *vrana ropana* (healing). Ghee is included in almost all preparations due to its best *rakta-pitta prashamana*, *vrina shodhana*, *vrina ropana*, *samsakaranuvartana* (transfers properties as it is of combined ingredients without losing its own properties) [14] etc. beneficial properties.

The external application mentioned as pradheha may also be used for sprinkling or for preparation ghrit yoga or *churna voga* used for dusting in wounds of *Visarpa*, ghee cooked with Durva juice promotes wound healing. All these external applications as pradeha should be used for samprasadana (cleansing and pacifying the blood). These are to be used repeatedly after removing the previous one. Thin predeha should be applied repeatedly after removing the previous one without washing it. In Kaphaja visarpa thick pradeha should be applied after removing the previous dried one. The pralepa should be prepared as kalka of micronized paste and applied of thickness equal to one third of the thumb. A pralepa should be neither too unctuous nor to dry, neither too solid nor to liquid, but of the right consistency. The stale *lepa* should never be used for application; the previously used lepa should not be used again for application because it causes accumulation of heat leading to kleda (putrification), visarpan (spread of disease) and pain. The *pralepa* smeared over a piece of cloth, it sudates the wound and consequently swedaja pidaka and itching are induced. If the pralepa is applied without removing the previous one, it produces same adverse effects as those mentioned in the case of applications over the bandage. The pralepa applied externally that is either too unctuous or too fluid does not adhere properly and therefore cannot alleviate the diseased condition. Thin *lepa* should not be applied because while drying develops cracks and its medicinal property does not penetrate in the affected part as it dries up quickly. If the *pralepa* is applied without mixing ghee, it produces same but in excess adverse effects

as described for thin *pralepa*. While getting dried up this *pralepa* leads to aggravation of disease manifestation. *Pralepa* is cold, thin and non-drying or drying. *Pradeha* is hot or cold, thick and non-drying. *Ālepa* is of medium character. *Alepa* pacifies *Rakta* and *Pitta*. *Pradeha* normalises *vata* and cleanses *kapha*, heals, normalise swelling and pain. It is used in both open and closed wounds. *Pradeha* checks discharges, softens, eliminates sloughing flesh, removes inside pus and cleans wounds. ^[15]

Various external applications may be used appropriately by experienced *Pranabhisar vaidya* ex. *Udumbaradipradeha*, *Nyagrodhadi lepa*, *Kaliyadi pralepa*, *Shadvaladi pradeha*, *Sarivadi pralepa*, *Naladadi pralepa* etc.

Rules for *pralepa*, *pradeha and alepa* should be followed strictly for desired effects. Researchers may use advance technology to prepare most effective external applications without changing basic principles.

Treatment principles as per Visarpa types

While treating *Vataja visarpa* experienced physician should consider the *samprapti* aspects for most appropriate treatment approach of *upstambhit vata* and *nirupstambit vata*. *Paittic visarpa* is curable with appropriate *pitta rakta* pacifying management. ^[16]

In *Agni visarpa*, *vata pitta* pacifying measures are beneficial and in *Kardama visarpa* mostly *kapha pitta* alleviating measures should be administered.

The *Granthi visarpa*, on inspection predominant in *Rakta* and *Pitta*, the physician experienced in timely management should treat the case with *rukshana*, *langhana*, *seka*, and *pradeha* of *pancavalkala*, *Siramoksha*, *Jalaukavcharan*, *Vaman*, *Virechana* and *kashaya-tikta ghrita* preparations. After *shodhan*, the measures alleviating *Vata* and *Kapha* are beneficial. If *Granthi* is strong, firm and stony hard and not responding to all these proven methods of treatment then it is better to open and extract.

If all the therapeutic measures described here as curative of *Visarpa* be put on one side and *raktamokshana* on other, they will be found equal. *Hence* expert physician should administer appropriately along with described therapies.

Visarpa is *Rakta* and *Pitta* predominant acute disorder hence *dosha* predominance should be considered along with general consideration of *Rakta* and *Pitta*.

Various internal medicines can be used, for example Kirattiktadi kashaya, Prapaundrikadi kwath, Drakshadi kashaya, Patoladi kashaya, Udumbaradi pradeha, Nyagrodhadi lepa, kaliyadi pralepa, Sarivadi pralepa, Naladadi pralepa etc. as per the indications.

Diet

Diet described for *visarpa* is basically *Rakta* and *Pitta prashamama* but do not vitiate *Kleda* (putrificatioy ingredient) and *Kapha*. Hence selection of described grains must be of old type. Preparation method principles should be followed strictly. *Purana shali, Yava* and *Godhum* [17] are not aggravating *Kapha* even though they are *madhu r*in *rasa* and *vipaka*. [18]

Of these measures, mostly *sheeta*, *ruksha* and *snigdha* ingredients should be given in *Paittik*, *Kaphaja* and *Vataja visarpa* respectively.

Diet and lifestyle concept of *Punarvasu Atreya* is timely tested and very beneficial. This should be applied appropriately by intelligent researchers, practitioners and dieticians.

Results

In review it is noticed that satisfactory lifesaving management is not existing for acute emergency cases of *Visarpa*. Online google search engine found 21 relevant articles and it is witnessed that research work is not carried out to the satisfaction on acute emergency conditions of *Visarpa*. [19]

It is noticed that *Agnivesh* is the foremost researcher who raised the question in front of *Punarvasu Atreya* regarding acute emergency, snake venom like spreading and fatal disease *Visarpa*.

It is not possible to compare *Visarpa* with single entity of allopathy, It is an umbrella term that covers various

doi: 10.46607/iamj.2908092020

Allopathic severe ailments like erysipelas, gangrene, necrotizing-fasciitis, B cell lymphoma of skin, extensive herpes, extensive burns, septicaemia, septicaemic shock etc.

After *samhita* period all have followed *Charaka* and *Sushrut's* description of *Visarpa* except additional few medications.

DISCUSSION

Ayurveda research centres are not well equipped for critical care hence Ayurveda researchers are not working on evolving emergency treatments for Visarpa disease. Prognosis of maximum serious cases of Visarpa is bad hence victims prefer Allopathic ICU instead of Ayurveda hospital because the strength of Allopathic science is emergency treatments in well-equipped intensive care units by experienced doctors.

Shodhana therapy is described for curable cases of *Visarpa* and maximum cases are incurable as per experience of *Punarvasu Atreya*. This is challenge to the researchers to apply *shodhana* therapy in incurable emergency cases along with lifesaving management to cure the incurable ones.

In treatment plan the concept to change the disease encouraging body environment should be considered. It is possible by *shodhana therapy* and proper medications.

CONCLUSION

Visarpa is an acute emergency disease and require critical care but satisfactory emergency management is not existing throughout literature. It is necessary to do research in collaboration with well-equipped intensive care unit and experts in emergency managements, besides it is need of time to develop Ayurveda intensive care units



Pic. 1. Antah-srita visarpa resembles with sepsis

http://www.medicaldaily.com/icu-patients-face-lower-risk-fatal-sepsis

Sepsis is caused by an immune response triggered by an infection. The infection is most commonly by bacteria, but can also be by fungi, viruses, or parasites. Common locations for the primary infection include lungs, brain, urinary tract, skin, and abdominal organs. Risk factors include young or old age, a weakened immune system from conditions such as cancer or diabetes, and major trauma or burns. Diagnosis is based on meeting at least two systemic inflammatory response syndrome (SIRS) criteria due to a presumed infection. Blood cultures are recommended preferably before antibiotics are started; however, infection of the blood is not required for the diagnosis. Medical imaging should be done to look for the possible location of infection. Other potential causes of similar signs and symptoms include anaphylaxis, adrenal insufficiency, low blood volume, heart failure, and pulmonary embolism among others.

Pic. 2. *Bahya ashrit visarpa* (http://how-shealth.com/gangrene-symptoms-pictures-causes-treatment/)

Wet gangrene usually develops rapidly due to blockage of venous (mainly) and/or arterial blood flow. The affected part is saturated with stagnant blood, which promotes the rapid growth of bacteria. The toxic products formed by bacteria are absorbed, causing systemic manifestation of sepsis and finally death. The affected part is oedematous, soft, putrid, rotten and dark.

Pic. 3. Vataja Visarpa

https://www.pinterest.com/pin/83457399319169052 Gas gangrene is a bacterial infection that produces gas within tissues. It can be caused by Clostridium, most commonly alpha toxin producing Clostridium perfringens, or various non-clostridial species. [6][10] Infection spreads rapidly as the gases produced by bacteria expand and infiltrate healthy tissue in the vicinity. Because of its ability to quickly spread to surrounding tissues, gas gangrene should be treated as a medical emergency.

Pic. 4. Pittaja visarpa

https://www.google.co.in/search?q=erysipe-las&biw=1366&bih=667&source=lnms&tbm=isch&sa=X&sqi=2&ved=0ahUKEwiVhJCixLzLAh-VJCI4KHXnJBD

Erysipelas is more superficial than cellulitis and is typically more raised and demarcated Affected individuals typically develop symptoms including high fevers, shaking, chills, fatigue, headaches, vomiting, and general illness within 48 hours of the initial infection. The erythematous skin lesion enlarges rapidly and has a sharply demarcated, raised edge. It appears as a red, swollen, warm, and painful rash, similar in consistency to an orange peel. More severe infections can result in vesicles (pox or insect bite-like marks), blisters, and petechiae (small purple or red spots), with possible skin necrosis (death). Lymph nodes may be swollen, and lymphedema may occur. Occasionally, a red streak extending to the lymph node can be seen.

Pic. 5. *Kaphaja Visarpa* (21.2) resembles with erysipelas

https://www.google.co.in/search?q=erysipe-las&biw=1366&bih=667&source=lnms&tbm=isch&s a=X&sqi=2&ved=0ahUKEwiVhJCixLzLAh-VJCI4KHXnJBD

Pic. 6. *Agni Visarpa* resembles with erysipalas https://www.google.co.in/search?q=erysipe-las&biw=1366&bih=667&source=lnms&tbm=isch&s a=X&sqi=2&ved=0ahUKEwiVhJCixLzLAh-VJCI4KHXnJBD

Pic. 7. *Kardam Visarpa* resembles with necrotizing-fasciitis, gangrene etc.

http://clinicalphysician.net/wp-content/up-loads/2014/08/3.necrotizing-fasciitis.jpg

doi: 10.46607/iamj.2908092020

Necrotizing Fasciitis (Flesh-Eating Disease) NF is a rapidly progressive infection that primarily affects the subcutaneous connective tissue planes (fascia), where it may quickly spread to involve adjacent soft tissue, leading to widespread necrosis (tissue death). Several different types of flesh-eating bacteria may cause this

life-threatening condition, which can affect both healthy individuals as well as those with underlying medical problems. Though rarely encountered, there has been an increase in the incidence of necrotizing fasciitis over the last few decades. Early identification and prompt treatment of necrotizing fasciitis is critical to manage the potentially devastating consequences

Pic. 8. *Granthi Visarpa* resembles with B cell lymphoma of skin.

http://cursoenarm.net/UPTODATE/contents/mobipreview.htm?4/49/4883

B-cell lymphomas account for the majority of nodal lymphomas, whereas primary cutaneous B-cell lymphomas (CBCLs) represent 20-25% of all cutaneous lymphomas. Because CBCLs have an overall favourable prognosis, proper recognition is vital for appropriate therapy and to avoid overtreatment in most cases. The tumour type and the extent of cutaneous involvement are the 2 most relevant prognostic factors in primary CBCL.

Pic. 9. Sannipatic Visarpa (21.2) resembles with septicaemia

https://noshinrezaie.files.wordpress.com/2013/07/245-1-hlight.jpg

It is a generalized infection caused by a germ that spreads throughout the body. It is always a serious disease and can be fatal if untreated.

REFERENCES

- Agnivesha, Charaka, Dridhabala, Charaka samhita, Charak Samhita New Edition. (2020, July 29). Charak Samhita, Visarpa chikitsa, edited by Vaidya Kendre Manchak Vaijenath, Retrieved 15:10, August 29, 2020 from http://www.carakasamhitaonline.com/mediawiki, 1.32.1/index. php? title=Charak Samhita New Edition&oldid=33492.
- Chakrapanidutta, Commnetator. Charaka Samhita, 2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi, 1990: Chi.Chak. 21/11
- Agnivesha, Charaka, Dridhabala, Charaka Samhita, Cikitsa Sthana, Visarpa Cikitsitam, 21. In: Pt. Dutta R, editor. 2 nd ed., 2003 reprint, Varanasi: Chaukhambha Bharti Academy; 2003; Chi.Chak. 21/11
- 4. Sushruta. In: Vaidya Yadavji Trikamji Acharaya, Narayan Ram Acharaya, editors. Sushruta Samhita, Varanasi: Chaukhambha Orientalia: 2007. Ni.10/11

- Agnivesha, Charaka, Dridhabala, Charaka samhita, edited by Vaidya Jadavaji Trikamji Aacharya,2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi, 1990; Chi.21/17
- Agnivesha, Charaka, Dridhabala, Charaka samhita, edited by Vaidya Jadavaji Trikamji Aacharya,2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi, 1990; Chi.21/23-25
- Chakrapanidutta, Commnetator. Charaka Samhita, 2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi, 1990; Chi.Chak. 21/37
- 8. Chakrapanidutta, Commnetator. Charaka Samhita, 2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi, 1990; Chi.Chak. 21/39
- Chakrapanidutta, Commnetator. Charaka Samhita, 2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi, 1990; Chi.Chak. 21/41
- Agnivesha, Charaka, Dridhabala, Charaka samhita, edited by Vaidya Jadavaji Trikamji Aacharya,2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi, 1990; Chi.21/42
- Agnivesha, Charaka, Dridhabala, Charaka samhita, edited by Vaidya Jadavaji Trikamji Aacharya,2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi, 1990; Chi.21/48-49
- Chakrapanidutta, Commnetator. Charaka Samhita,
 2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi,
 1990; Su. Chak. 10/8
- Sushruta. In: Vaidya Yadavji Trikamji Acharaya, Narayan Ram Acharaya, editors. Sushruta Samhita, Varanasi: Chaukhambha Orientalia; 2007. Su.13/5-7
- Agnivesha, Charaka, Dridhabala, Charaka samhita, edited by Vaidya Jadavaji Trikamji Aacharya,2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi, 1990; Su.13/13
- Sushruta. In: Vaidya Yadavji Trikamji Acharaya, Narayan Ram Acharaya, editors. Sushruta Samhita, Varanasi: Chaukhambha Orientalia; 2007. Su. 18/6
- Chakrapanidutta, Commnetator. Charaka Samhita,
 2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi,
 1990; Chi.Chak. 21/142
- Chakrapanidutta, Commnetator. Charaka Samhita,
 2nd edition, Chaukhamba Sanskrit Sansthan, Varanasi,
 1990; Su. Chak. 27/19
- Sushruta. In: Vaidya Yadavji Trikamji Acharaya, Narayan Ram Acharaya, editors. Sushruta Samhita, Varanasi: Chaukhambha Orientalia; 2007. Su.46/41
- Anantkumar V Shekokar, Kanchan M Borkar, A. Afjal.
 A.R.Sheikh. To Study the Efficacy of Pratisaraniya

doi: 10.46607/iamj.2908092020

- Kshara in the Management of Visarapa (Cellulitis). International Journal of Ayurveda and Pharma Research. 2017; 5(5):40-46.
- 20. Septicemia images available from http://www.google.co.in

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Kendre Manchak & Jaybhaye Sulakshana: Existing Emergency Management Used For Visarpa Disease. International Ayurvedic Medical Journal {online} 2020 {cited September, 2020} Available from: http://www.iamj.in/posts/images/upload/4478 4486.pdf