

Role of *Ayurveda* in emergency treatment

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Abstract

It is believed that emergency treatment in ayurveda is not present and in emergency one need to take only allopathic medicines and ayurveda has limited role to play in chronic ailments only. This belief in society and Ayurvedic physicians has arrested development of ayurveda, and limiting its role as adjuvant therapy. Ayurveda to become main line of medicine needs to have emergency management. The emergency management was described in ayurveda, which needs only enlightenment.

In this article an attempt has been made to understand ayurvedic basics of emergency management. It includes understanding emergency condition according to ayurveda and management accordingly. It is important to note that mild to moderate emergency can very well be managed according to ayurveda.

The concept of emergency, principles of management, various

Ayurvedic drug formulations etc. are discussed in full article

Keywords: Atyaayik chikitsa; Emergency, Ayurveda; Jwara

Introduction

It is a belief in common public that Ayurveda can treat only chronic diseases and not acute diseases. This belief is wrong, misleading and devaluating Ayurveda. From the Ayurvedic texts it is very clear that even emergency diseases or acute diseases were very well treated by Ayurvedic treatment.

Ayurvedic has been criticized for no availability of emergency management, which is mere a belief. There may be aroused whether there was no emergency in ancient times and people were suffering only from chronic ailments? The answer to this question is no and people were managed in life threatening conditions too. There is documentation in the literature of daruna and ashukari (emergency) diseases,

which implies that emergency was managed using ayurvedic medicines.

Aims and Objective

1. To study the ayurvedic basis of emergency management
2. To study the text for necessary references that describes emergency management.

Material and Methods

1. Relevant ayurvedic and modern literature is the material of the paper Old ayurvedic treatises
2. The comparative study of both the literature and correlation method is adopted in the study.

Review of Literature

There is a big gap observed in ayurvedic literature. This gap may be due to dark medieval period which was approximately of 2000 years. During this time period there were many invasions, and probably this is the reason of break to the development of Ayurvedic science. All the ancient literature we get is outrageous work of a few scholars. Many books were destroyed during the medieval period and the references from other books opines their contribution to the science.

Here an example can be given of Bhavprakash, there is description of 33 types of sannipataj jwara, which are described in other Ayurvedic texts that are not available today. The description of sannipat Jwara is the description and treatment of acute febrile emergencies, which will be dealt with further. Pathogenesis of acute emergencies in General How acute emergencies take place or arise is a question which is not solved in modern science. Ayurvedic has thought of emergencies in general and in

diseases also. While dealing with “VIKARA-VIGHAT-BHAVABHAVA” i.e. incidence or non incidence or suppression of diseases, Charaka has dealt with emergencies. Charaka says, ‘Occurrence or suppression of diseases occurs as a result of variations in Nidan (Etiological factors) intensity of Doshas and susceptibility of Dhatus . Further Charaka says, ‘If these three factors do not mutually associate or if they do so after a long lapse of time or in a mild form, either there occurs no manifestation of diseases at all or the disease takes a long period to evolve or appears in an ambulatory or abortive form. Under the contrary conditions, there occur contrary results.’ Chakrapani commencing on the 2nd phase clear that when these 3 factors viz. Nidan (etiological factors), Doshas and Dushyas (body elements) unite or associates, rapidly associate super strongly, produce diseases very rapidly or with strong manifestations of diseases or with all the signs and symptoms of the diseases. This condition is called acute diseases or emergency .

Thus when the etiological factor is powerful, the association or morbidness of doshas is also very great. Both these factors vitiate the body, elements or Dhatus rapidly. This rapid morbidness is called emergency or acute condition of disease.

CAUSES OF MEDICAL EMERGENCIES-

- Marmaghaat
- Ati – Rakta Sraava
- Pranavaha Sroto Dushti
- Pranoparodha

- Atyartha Udaka kshaya
- Ojo – Kshaya

MAIN CHARACTERISTIC FEATURES

- Daruna Marma Ruja
- Atyanta Rakat sraava
- Kashta Shwasa
- Indriya Nasha
- Sanjnaa Nasha
- Murccha
- Hetu sambaddha anya lakshana Samucchaya

Understanding Emergency as a Complication

Charaka, explaining 'Upadrava' (complication) says 'complication is more troublesome than the main disease itself because it appears in the later stages of disease, when the body is already weakened by the previous disease. Hence the physician should be prompt in the treatment of upadravas (Complications) .

This sutra also clears the condition of emergency. This means that due to lack of resistance, powerful complications arise and emergency treatment should be started.

Charaka, in the Chapter 'Roganeeka' Viman 6, divides diseases in many different ways like effect, intensing, seat of affection, cause, seat of origin etc. In these divisions, one of the groups is Mrida (mild) and Daruna (severe) . Here Daruna means acute condition or emergency .

Regarding the classification of Mrida (mild) and Daruna (severe) Charaka has a clear concept of curabiling or incurabiling. Mrida, Daruna and Sadhya, Asadhya are different. He uses

the term Daruna where the disease is acute or requires prompt treatment. Daruna does not mean incurable. That is why charaka says 'There are many such diseases which though acute and severe are yet curable. They may kill the patient if they are either not treated at all or wrongfully treated.' This clearly states the condition of emergency which requires prompt and accurate treatment .

Acharyas have often warned the treating physicians to start prompt treatment by using the terms 'Twaraya Jayet'. All having the meaning of prompt treatment.

Emergency Conditions in Day to Day General Practice

There are 3 types of emergencies viz. medical emergency in which the treatment can be given with only medicines. Certain are surgical where surgical interference is necessary and third are Gynecological emergencies. One more emergencies may be added with these types of emergencies and that may lead to medico-legal complication burns, poisoning etc. unless authorized, a General practitioner is advised not to treat such cases because that may lead to medico-legal complications. The duty of an Ayurvedic Physician in emergencies Ayurveda deals

with the subject of emergencies in detail. The physician should be well – conversant with the present condition and also for the prognosis; he should explain everything to the satisfaction of the patient and his relatives and start treatment with courage and confidence. In surgical and gynecological emergencies, if the physician is trained, handle the patient, he can do so; but if is not trained to surgical and gynecological

operations; it is the duty of the physician to diagnose the disease, refer to the proper surgeon or gynecologist.

Emergencies Management of Diseases

Here, list of the diseases, which require prompt and careful treatment, is given below with the name in Ayurveda, the reference from where the description is taken and its nearest modern interpretation.. It is not exhaustive. Even more diseases can be added. This is given with the idea that it may prove to be a guideline for further studies.

Charaka also says 'This is quite adequate for the average physicians for the practical purpose of treatment; for the highly intelligent, who are proficient in the art of inference; it will serve as a guiding principal for the comprehensive knowledge, not mentioned here.

Medical Emergencies

There are certain embarrassing symptoms in fever. They may occur as a symptom or as a complication with or without fever. They have been classified as a special type of 'Sannipat Jwara'. It may be clearly understood that Bhava Mishra has narrated 3 sets of 13 types of 'Sannipat Jwara'. Some of them are coming for treatment to a physician.

These types of **sannipat Jwara** require special treatment, though they may be symptoms according to the modern science or Ayurveda.

These conditions are:-

- (1) Tandrika Sannipat Jwara Bhava - **Typhoid state**
- (2) Pralapaka Sannipat Jwara Bhava- **Febrile delirium**
- (3) Akshaepaka Sannipat Jwara Bhava - **Febrile Convulsions**
- (4) Karnika Sannipat Jwara Bhava - **Infective Parotiditis Mumps**

- (5) Teevra Sannipat Jwara Bhava - **Hyperpyrexia**

- (6) Sheetanga Sannipat Jwara Bhava - **Subnormal Temperature or Crisis**

- (7) Swasa-santamaka or Pratamaka - **Dyspnea with fever**

- (8) Shoola- **Painful condition**

- (9) Anidra- **Sleeplessness**

- (10) Antarlohitā and many other-
Symptoms associated **Internal Hemorrhage** with or without fevers. There are certain emergencies, where fever is generally not present. If fever is associated in those condition, secondary infection or even very grave condition should be suspected.

These conditions are:-

II Atisara & Pravashika:-

- (1) Teevra Atisara- **Severe diarrhea**
- (2) Rakta atisara- Ch.chi-18- **Bleeding per rectum** eg. Ulcerative colitis, bacillary, dysentery
- (3) Apkshaya- **Dehydration**
- (4) Mootraghat -Ch.chi-18 -**Retention of urine**
- (5) Vishoochika -Ch. Vi-2 **Gastic – enteritis**

III Swasa or Breathlessness:-

- (1) Tamaka Shwasa -Ch. Chi-1- **Br. Asthma**
- (2) Pratata Kasa- Ch. Chi. 19- **Asthmatic Bronchitis**
- (3) Tamaka Shwasa- **Status asthmatic**
- (4) Hrid – Shwasa- **Cardiac ashthma**
- (5) Whooping Cough

III Chhardi or Vomiting

- (1) Chhardi- Ch. Chi.20- **Vomiting**
- (2) Rakta Chhardi -Ch. Chi.2- **Hemetemesis**

IV Hrid Roga -(Diseases of Heart)

- (1) Hrid upaghata -Ch. Indriya- **Myocardial infarction Coronary heart disease Angina**

(2) Hrid Bheda -Ch. Indriya -**Heart failure Heart Block**

(3) Raktachapa Vriddhi- **Hypertension**
V Vata – Vyadhi (Diseases of nervous system)

(1) Paksha – Va (1) Paksha – Vadha- Ch. Chi. 28 -**Paralysis** of Sudden onset as in cerebral thrombosis ,Cerebral Embolism, Cerebral Hemorrhage

(2) Shoola- **Painful conditions**

(3) Akshepak & apatanatak-
Convulsions

VI Mada, Moorcha, Sanyasa

(1) Moorcha -Ch. Sk.- **Unconsciousness**

(2) Bhrama-**Giddiness or Vertigo**

(3) Sanyasa -**Coma** – Diabetic ,Uremia,Hepatic

Udar Roga

(1) Teevra Udar Shool -Ch.Chi 13 -
Acute abdomen

(2) Adhmana -**Flatulence**

(3) Shoola – Tooni -**Renal Coli** Prati Tooni- **Billiary colic**

Udar Shoola- Appendicudar and intestinal colic

(4) Antar Lohita- **Internal Hemorrhage**

(5) Chhidrodara- **Perforation**

These are the medical emergencies, which a physician comes across in daily practice. Some of the conditions can be treated easily by Ayurvedic treatment. In some, modern technique may be required.

For example, oxygen may be required in cases of status asthmaticus or heart failure. But majority of the above can be treated by Ayurvedic means and medicines .

Surgical Emergencies

There are certain emergencies, which require surgical treatment. But it becomes the duty of a physician to start Preliminary treatment and relieve the

symptoms upto the time the patient is in the hands of an Expert. The surgical emergencies are:-

(1) Sadhyovrana- **Ulcers and wounds** mostly accidental

(2) Bhagna -**Fractures & dislocation**

(3) Antra-Vriddhi –**Intestinal hernia**

(4) Pranasta Shalya- **Foreign bodies**

(5) Visarpa -**Cellulitis & erysipelas**

Gynecological Emergencies

(1) Atirajapravrutti- Ch.Chi.30-
Menorrhagia & metrorrhagia

(2) Gharbhastrava & Garbhapata- Ch. Sha. 8 -**Abortion & miscarriage**

(3) Pushpa – darshan- Ch. Sha. 8-
Threatened abortion

(4) Garbhini Rogas- Ch. Sha. 8- **Diseases during Pregnancy**

(5) Moodha – Garbha- Su. Ni. -**Difficult labour**

Medico-legal Emergencies

As suggested, it is advisable not to treat the cases where medicolegal complications may arise, unless authorized, still a physician may have to attend such cases. In this condition, a physician should be careful to inform proper authorities and should be careful in history – taking and examination of the patient because he may have to be present before the court of law for evidence, such emergencies are :-

(1) Agni – dagdha -**Burns**

(2) Visha – peeta- **Poisoning**

(3) Vrischika Damsha -**Scorpion Bite**

PRINCIPLES OF MANAGEMENT

Identify the dosha involved

- Discriminate and differentiate between Guru

& Laghu Resuscitate the vitals

- Regulate / Pacify Vata first

- Major is attended first and minor is taken care of later
- Emergency is attended first and the disease is managed along with or in due course
- Administer the established treatment for presenting complaint
- Maintain the normal functions of Dosha, Dushya, Agni, Srotas & Mala

Ayurveda suggests **few routes of drug administration** that bypass the digestion and act in Emergency & certain other modalities – Nasya, Sublingual, Basti, Suchi, Rakta-Mokshana, Lepa etc.

Sub – Lingual -Sublingual mode is selected as it has profuse network of blood vessels and enters directly into systemic circulation. It is economical as well and the drug absorption is very quick as it avoids first pass of the drug. Honey is mainly used for its yogavahi property as it acts as drug vehicle as well as catalyst. Pottali Kalpa yogas with popular dosage forms that are commonly used through this route. It can be used comfortably in unconscious patients also.

Nasya-

Olfactory and gustatory nerves are comparatively closer to the higher centres of brain than other nerves. Bioavailability of the drugs is 55-100% as the drug skips first pass metabolism (directly enters into circulation without getting processed in the gut). This route provides rapid delivery of drug across the large surface area of the mucus membrane of respiratory tract. Drug is delivered directly to the site of action and systemic effects are minimized.

Basti -The rectum has a rich source of blood and lymph supply. The substances administered are readily absorbed from rectal mucosa into blood stream of villi through intestinal mucosa by osmosis. The Gastro-intestinal tract has its own nervous system called enteric nervous system lying in the entire wall of the gut. The sigmoidal, rectal and anal regions of large intestine are better supplied with parasympathetic fibers (which are more stimulatory in action) than other portions. Hence Basti, though administered in the Pakwashaya and remains only for shorter duration in the body has a systemic action throughout the body. Hence Basti was given a prime place in Ayurveda for its broad spectrum activity and efficacy in controlling Vata Dosha which is considered to be the chief causative factor in most of the emergencies in one way or other.

Lepa- Application of drugs directly to skin introduces drug into the loose subcutaneous tissues achieves systemic effect. The absorption is reasonably slow, uniform but smooth. The rate of absorption depends on the physical properties of the drug and skin at the site of application. This route is mostly used for sustained delivery of drug. First pass metabolism is avoided and the Gastric factors.

Drugs For Emergencies-

When we scan through rich literature of Ayurvedic treatments and drugs, we can observe that 3 drugs viz. Hemagarbha Pottali Rasa, Trailokya Chintamani Rasa and Suvarna Sutasekhara Rasa have been praised to be the drugs of choice in Ayurvedic Critical Care. Their spectrum

of activity with the indications has been given here under.

Hemagarbha Pottali	Trailokya Chintamani	Suvarna Sutasekhara
<p>Tamogunavruta Lupta praaya chetana jagruti Buddhi, Mana, Tama Avarana chedana</p> <ul style="list-style-type: none"> • Indriya karya samprerana • Kapha chedana • Margavarodhajanya Vataprakopa • Shamana Vatagati avasada nashana • Hridaya, Nadai, Shwasagati avasada nashana <ul style="list-style-type: none"> • Agni Deepthi • Highly indicated in: Slaishmika sannipata • Shwasanaka sannipata, Tamaka shwasa, Urdhwa shwasa, Maha shwasa 	<p>Vikruta kapha avarana chedana Vatagati avasada nashana</p> <ul style="list-style-type: none"> • Agni, Dhatwagni deepana • Hridaya, Indriya rakshaka • Twarita Ojo vardhaka • Sendriya visha nashana • Useful in- Slaishmika sannipata, Shwasanaka sannipata Kapha, Ama sroto avarodhajanya vyadhi • Hridroga Hridaya, Puppusa karya niyantrana Ojo Kshaya • Twarita Hricchula nivarana • Manasika aghaata janya Hridroga • Indriya avasada nashana • Peshi niyantrana • Highly useful in: Pakshaghata • Vata vyadhi, atyanta Kshinavastha: 	<p>Utkrushta Tridosha shamaka</p> <ul style="list-style-type: none"> • Panchavidha Vata gati niyamana • Pranagati niyamana • Indriya, Mano, Buddhi karya niyantrana • Shwasa Niyantrana • Samanagni niyantrana • Agni, Dhatwagni deepana • Pitta srava niyamana • Anna purassarana kriya niyantrana • Sara – kitta vibhajana • Shoshana kriya niyantrana • Swedotpatti niyantrana • Ras samvahana niyantrana • Mala pravartna niyantrana <ul style="list-style-type: none"> • Peshi and anya sharira bhavakriya niyantrana • Saama, Amla, Drava, Visru gunayukta pitta niyantrana • Kapha shaman • Visha nashana

Herbs for asthma

- Bala offer bronchodilator effect.
- Gotu Kola and vasa relief pitta type asthma.
- Ephedra, thyme, pepper, ginger and cayenne help to treat kapha type asthma.

- Herbal tea of ajwain, tulsi, pepper and ginger acts as natural expectorant.
- Yashtimadhu prevent airways obstruction.
- Pepper + honey + little onion juice.
- Gum of Asafetida + Honey is also useful in asthma.

Ayurveda formulation for asthma

- Sitopaladi churna reduces chest congestion.
- Kantakari Avaleha reduces frequency of asthmatic attacks.
- Talisadi churna offer relief in allergic bronchitis.
- Vasarishta act as expectorant.→
- Padmapatradi yoga increased peak expiratory flow→ rate.
- Shwasakuthar Rasa reduces obstruction.→ Swasa Sudharana helps to maintain normal Respiration

Formulation to relief childhood asthma

- Bharangyadi Avaleha
- Shirishavaleha
- Vasa Haritaki Avaleha
- Kantakari Avaleha

Management of Sannipat Jwara

An investigation study report efficacy of following quath in fever

•Pitta – Papada, Amaltas, Musta, Brahmi, Daksha, Dashmoola

Management of other acute fevers-

Following drugs help to pacify aggravated pitta, reduces toxins and maintain body thermostat

- Praval Pisthi
- Godanti Bhasma
- Tulsi Powder
- Giloy Satva
- Tribunkirti Ras
- Shadanga Paniya
- Amritasthak Kwath
- Ananda bhariva Ras

Management of Dehydration

- Karpoor Rasa
- Lemon juice, honey with water
- Shankh bhasma to control frequency of stool.

Management of cardiac emergency

Combination may offer relief in cardiac problems

- Hingu churna, Lavana• & lemon juice.
- Hingu churna, Lavana along with other hridya aaushadha.
- Hingu churna, Lavana & Gokshru Panchamula.
- Hingu churna & Bilvadi Panchamula.
- Haritaki, nagar, puskarmula, hibera & hingu.
- Decoction of kshra, matulung, shati, puskarmula,
- Shunthi, palasha & vacha.

Ayurveda management of surgical emergency & trauma:

- Nasa Sandhana: Reconstructive surgery of nose mentioned by Sushruta resembling plastic surgery.
- Karna Sandhana: Reconstructive surgeries of ear lobule caused by trauma or injury.
- Anorectal techniques: Fistulous tract such as; langalaka, ardhlangalak, sarvatobhadrak, gotirthak & kharjurpatrak may also removed by ayurveda para-surgical procedure.
- Sutures for baddhagudodara and chhidrodara also mentioned in Sushruta Samhita.
- Asthisandhi bhagna chikitsa for the management of fracture/displacement of bones.

Ayurveda procedure for management of poisoning:

- Arishta/Venikabandhana
 - Utkartana
- Nishpeedanam
 - Chushana
- Agnikarma
 - Parisheka

- Avagahana
 - Raktamokshan
- Vamana
 - Virechana
- Upadhana:
 - Anjana
- Prativisha

Discussion

Ayurveda can also be useful in emergency conditions and life threatening conditions. Some examples are cited in the paper to justify that ayurveda can also be useful in emergency conditions. The study of literature reveals that ayurvedic scholars were aware of medical, surgical and gynecological emergencies are the appropriate management is prescribed.

Conclusion

Here it may be concluded that ayurvedic medicine is useful in management of emergency conditions.

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