

Aushadha sevan kaal and its Prayog Marga

INTRODUCTION

Bhaishajya Kaal (time of drug administration) is an important principle to be considered while treating a disease.

To highlight its imperial role in *Chikitsa*, there is an immense necessity to analyze this concept, which is the need of the hour.

Bhaishajya Kaala is mainly explained in relation with *Bala* of *Roga*, *Rogi*, particular *Dosha*, *Dooshya*, and various other factors.

- ▶ The effect of the drug depends not only on the dose and mode of administration but also on the time of administration.
- ▶ *Bhaishajya Kaala, Aushadha Kaala, Bhaishajya grahana Kaala, Aushadha Avacharana Kaala, Agada Kaala, and Aushadhavekshana Kaala* are the various synonyms used to indicate time of administration.

Samhita	Synonyms
Charaka Samhitaa Sushruta Samhitaa	Bhaishajya Kaala-
Ashtanga Hridaya, Kashyapa Samhitaa	Aushadha Kaala-
Ashtanga Sangraha	Aushadha Avacharan Kaala-
Shaarangdhara Samhitaa	Bhaishajya Grahan Kaala-
Harita Samhitaa	Bheshaja Upakrama Kaala

❑ Number of *Bhaishajya Kaala*

- ▶ There are three different opinions regarding the numbers among *Acharyas*
- ▶ 10 – *Charak, Sushruta, Ashtanga Hridaya*
- ▶ 11 – *Ashtanga Sangraha*
- ▶ 5 – *Sharangadhara*

Types according to Acharyas

<i>Sr. No.</i>	<i>Ashtang Sangrah</i>	<i>Acharya Charak</i>	<i>Acharya Sushrut</i>	<i>Sharangdhar</i>
1.	Abhakta	Bhakta	Abhakta	Suryodaya
2	Prabhakta	Bhaktamadhyam	Prabhakta	Diwasbhojana
3	Madhyambhakta	Muhurmuhur	Madhyambhakta	Sayankala
4	Adhobhakta	Samudga	Adhobhakta	Muhurmuhuh
5	Sabhakta	Bhaktasamyuka	Sabhakta	Nishi
6	Antarbhakta	Sagras	Antarbhakta	
7	Samudga	Grasantar	Samudga	
8	Muhurmuhu	Nisha	Muhurmuhu	
9	Sagras	Grasa	Grasa	
10	Grasantar	Grasantar	Grasantar	
11	Nishi			

Aushadhi sevana kala & Its Indication

	Kala	Specific Indication
1.	Abhakta	Sukumar, Bala, Vriddha
2	Prabhakta	Bala, Vriddha, Sukumar
3	Madhyambhakta	Koshthagat Vyadhi
4	Adhobhakta	Urdhva Sharirgata Vyadhi Balya
5	Sabhakta	Mano Balvardhaka, Deepana
6	Antarbhakta	Vyana Vyadhi
7	Samudga	Hikka
8	Muhurmuhu	Hikka, Shwasa, Kasa, Vaman
9	Sagras	Prana Vayu Vikruti
10	Grasantara	Mandagni
11	Nishi	Urdhva jatrugata vyadhi, Vaman, Dhumapana

Abhakta (Nirranna)



- ▶ *Abhakta* means administration of *Aushadha* before food.
- ▶ *Abhakta*, *Ananna*, *Nirbhukta*, *Nirranna* are used as synonyms.
- ▶ *Chakrapani* says *Abhakta* means, it should be before food in the morning.
- ▶ The medicine is administered in the empty stomach when the *Koshtha* is devoid of *Kapha Utklesha*. Because if there is *Kapha Utklesha*, the medicine will not come in contact with *Agni* (digestive fire), and will not be digested properly and effect will be either delayed or reduced. Hence, medicine is administered only after the *Kapha Udreka* is over

Indications

- ▶ The action of the medicine administered during this *Kaala* is enhanced due to the empty stomach. Hence, the physician should see the strength of disease and patient. If both are strong this *Kaala* should be selected. With this idea the following indications are told;
- 1. *Pancha Vidha Kashaya Kalpanas* (five basic formulations): They are heavy and need strong *Agni* to digest them.
- 2. *Lekhanartha* (scraping) and *Utklishta Kapha Pitta*: The *Apatarpana* is the line of treatment in both the conditions.
- 3. *Abhakta Kaala* provides a suitable time for the administration of both *Kapha Udreka Avastha Gata Kaala*.

Contraindications

- ▶ It is contraindicated in children, aged, etc., who cannot withstand the potency of the medicine, administered in this *Kaala*.
- ▶ It will kill the person like the weak one is killed by the strong one. Thus the simile indicates if one administered medicine without considering the above fact, will produce complications like *Glan*i and even death.

Pragbhakta

- ▶ In this *Kaala*, drug is administered just before food, when the person is hungry; the previously consumed food is completely digested.
- ▶ Drug given in this *Kaala* gets digested quickly. As it is covered by food, it is safe in children, old patients.
- ▶ Drug given in this *Kaala* is followed by meal. Food covers the drug from upper side. This prevents *Urdhva Gati* of drug and enhances *Adhara Gati*. This helps drug to reach at site of *Apaana*.
- ▶ Though *Sthaulya* is *Kaphaja Naanaatmaja Vikaara*(C. Su.21) the *Vaata* and the *Agni* are main factors in its pathogenesis and are restricted in the *Koshtha*. Drug administered in *Praagbhakta Kaala* pacifies the *Vaata* and *Agni* is controlled which leads to control *Kshudhaa*.

Madhyam Bhakta

- ▶ *Madhya* means halfway through the meal.
- ▶ In this *Kaala* drug is administered in between the meal. As drug is given in between the food it is covered by the food.
- ▶ It affects *Urdhva* as well as *Adho Gati* of drug. *Gati* of *Samaana* is also towards *Koshtha*; which prevents *Tiryak Gati* of drug. *Sushruta* has explained it in term of *Avisaaribhaavat*.. This term shows that the drug given in *Samaana Kaala* is limited to *Koshtastha* organs due to its *Avisaaribhaava*.
- ▶ Site of *Samaana* is *Grahani*. So the drugs given in this *Kaala* directly comes in contact with *Agni* and *Samaana Vaata*. Then it cures the diseases of *Agni* and *Samaana Vaayu*.
- ▶ *Paachaka Pitta* is needed for digestion. Drugs; given in this *Kaala* act on *Paachaka Pitta* and increases digestion

Adhobhakta



- ▶ This *Kaala* comes immediately after the food. Here drugs are administered after food. This prevents *Adhara Gati* of drug. Drug can spread with *Urdhva* and *Tiryak Gati*.
- ▶ *Vyaana Kaala* is after lunch. In day time, *Rasavaha Srotas* and its *Moolasthaana* i.e. heart is in *Vikasita Avasthaa*. Hence drugs given in this *Kaala* acts on the heart as well as *Vyaana Vaayu*.
- ▶ *Udaana Kaala* is after dinner. When the drugs given at night-after the dinner, act on *Udaana Kaala* and the diseases due to *Udaana Prakopa*.
- ▶ Site of *Kapha* is also at upper part of the body.
- ▶ Hence the drugs given in this *Kaala* are useful in *Kapha Roga*. Drugs, which have *Brihana Karma* used for *Sthoolikarana*, are used at

Sabhakta

- ▶ Administration of drugs with the food is called as *Sabhakta*. Those drugs, which do not have the pleasant taste and odor are mixed with the food and then administered.
- ▶ This *Kaala* is ideal in the children and the persons who refuse the medicine.
- ▶ The drugs given in this *Kaala* mixed in *Rasa Dhaatu* and spreads all over the body in *Urdhva*, *Adhara* and *Tiryak Gati*, therefore useful in those diseases, which are spread all over the body.

Antarbhakta

- ▶ *Antaraabhakta* means in between meals. When the process of the digestion of the lunch is completed, drug should be administered; again after digestion of drug dinner should be consumed. This *Kaala* is useful in the disease of *Vyaana*.

Saamudga

- ▶ Drug administered just before meal and immediately after meal. This enables *Urdhva* as well as *Adhara Gati* of Drug.

Muhurmuhu

- ▶ The word *Muhurmuhu* means again and again, *Aushadha* is repeatedly taken with or without food.
- ▶ **Indications**
- ▶ *Shwasa* (dyspnoea), *Kasa* (cough), *Trishna* (thirst), *Hikka*, *Chhardi* (vomiting), *Visha* (poison), *Swarabhanga* (hoarseness of voice).
- ▶ This *Kaala* can be broadly divided in two:
 - a. Abhakta Muhurmuhu
 - b. Sabhakta Muhurmuhu
- ▶ The indication of with or without food may be chosen by considering *Bala* of the patient. This *Kaala* is indicated in *Shwasa*, *Kasa*, *Trishna*, *Hikka*, *Chhardi* and *Visha* where continuous *Vegas* are produced. Hence *Aushadha* is administered repeatedly so that it can maintain its effect throughout.

Sagraasa

Drugs administered with each *Graasa* (moracel) of meal.

This *Kaala* is for the diseases of Hriday and Prana.

Annagrahana is the function of *Praana*. Drug administered in this *Kaala* directly acts on *Praana* and cures diseases of *Praana*.

Drugs for *Agnideepana* and *Vaaieekarana* are administered in this *Kaala*.



Grasa – Grasantarrah

- ▶ *Grasa* means *Aushadha* mixed along with each bolus of food, also known as *Sagras* and *Grase-Grase*.

Indications

- ▶ This is indicated in *Prana Vata Dushti* and *Vajeekaranartha* (increasing vigor), *Agni Sandeepanartha*.
- ▶ *Grasa*: can be used where the form of medicine is *Churna* (powder), *Vataka* (tablet), *Leha* (confections).
- ▶ *Grasantara*: this is used when one wants to administer the *Vamaneeya Dhumapana*.
- ▶ *Annapravesh* (deglutition) is the function of *Prana Vata*. The *Aushadha* administered with each *Grasa* will come in contact with *Prana Vata* in *Mukha* (oral cavity), *Kantha* (throat), *Urah* (chest), etc., leading to the continuous contact with *Prana* and conditions related to that could be easily

Nishi

- ▶ Administration of *Aushadha* at night is called *Nishi*.
- ▶ **Indication**
- ▶ *Urdhwajatrugata Vikara* (diseases above the neck). *Urdhwajatru* is the site of *Prana Vata*. Thus medicine administered in this *Kaala* acts over *Prana Vata*.
- ▶ *Aushadha* should be administered at the time of sleep. According to Ayurveda one should go to sleep after the digestion of the evening food.
- ▶ Hence medicine should be administered after the digestion of evening food.

Chronotherapy:

➤ Awareness of the recent research workers towards applied aspect of Kala is evident in the form of chronotherapy and chronopharmacology. Our bodies rhythms, also known as biological clocks, take their cue from the environmental and the rhythms of the solar system.

➤ Definition And Scope Of Chronotherapy:

- Co-ordinating biological rhythms (Chronobiology) with medical treatment is called chronotherapy.
- It considers a person's biological rhythms in determining the timing and some times the amount of medication to optimize a drugs desired effects and minimize the undesired ones.

Drugs that are reformulated as chronotherapeutics are regulated by the food and drug administration. Chrono therapeutics present new challenges to regulators and scientists alike.

Among additional factors that must be considered with respect to chronotherapy are:

- (i) Time of day a drug is administered
- (ii) Time related biological factors such as seasonal disorders.
- (iii) Patients normal routines (eg. eating times and sleep patterns).

Bheshaja Prayog Marga

- ▶ Administration of drug is undertaken after careful examination of the patient. The route of administration of a drug is selected after careful consideration of certain criteria like age, Constitution, *bala* of the patient and also the clinical condition and the prevalent and predominance of the dosha.
- ▶ In women particular care should be taken of menstrual period, pregnancy while administering the drug.

► According to Ayurveda, the drug is administered through the channels of

1. Mukha
2. Nasa
3. Netra
4. Karna
5. Twacha
6. Guda
7. Yoni
8. Mutra marga

Mukha- This is the most commonly used route for administration of drug. This route is selected for

- ▶ A. Local action – Gandusha, Pratisaran etc
- ▶ B. Action of GIT – Deepan, Pachan, Vaman, etc
- ▶ C. Action on respiratory system - Dhumapana etc
- ▶ D. General action – Drug given by this route are absorbed, digested, assimilated and circulated all over the body to exert desired action

Nasa-

- ▶ This route is selected for the following therapeutic purpose:
- ▶ A. Local action : Nasya etc.
- ▶ B. Action on respiratory system – Dhumapana etc
- ▶ C. Action on head and systemic disorders – Shiro-virechan



Netra-

- ▶ This is exclusively used for the management of eye diseases.
- ▶ Seka, Aschotana, Pindika, Bidalaka, Tarpana, Varti, Anjana are usually employed through this route.



Karna-

This route is also an exclusive one meant for the treatment of diseases of Ear. Washing, fumigation and *Karnapuran* are the procedure adopted through this route.



Twacha- This route is selected for the treatment of mostly localized conditions and in some cases for systemic disorders as well.

- External application like abhyanga, lepa, parisheka, udwartan etc resorted through this route



Guda-

This is the most important route of administration after the route in ayurvedic therapeutics.

As Basti karma, the effective therapeutic procedure in ayurveda is employed through this route.



Yoni —

- ▶ This route is selected for the treatment of uterine disorders and infertility especially in females.
- ▶ Uttarbasti and fumigations, washings, suppositories etc. are used through this route.

Mutramarga —

This route is selected for the management of urogenital tract diseases especially in males and also for the management of infertility in males.

Drug Dosage form

- ▶ Dosage forms are the means by which drug molecules are delivered to sites of action within the body.
- ▶ The need for dosage form-
 1. Accurate dose
 2. Protection
 3. Protection from gastric juice
 4. Optimal drug action
 5. Insertion of drug into body cavities
 6. Masking taste and odour

Classification



Route of Administration

1. Oral
2. Topical
3. Rectal
4. Parenteral
5. Vaginal
6. Inhaled
7. Ophthalmic
8. Otic

Physical Form

1. Solid
2. Semisolid
3. Liquid
4. Gaseous

Modern aspect

- ▶ According to modern pharmacology different routes of administration have been described to meet various needs and necessities in different clinical condition.

1. Local – This route is mean for localized action and effect. Dusting powders, lotions, drops, pastes, ointments and cream are used in this route.



Enteral (Oral): This is the widely adopted route of drug administration used for the systemic management of disease. Tablets, capsules, pills, tonic, syrup, powders and mixtures are usually administered through this route.

- **Advantages :**
- a. Safe
 - b. Convenient
 - c. Economical
 - d. Less-Complications



► Disadvantages:

- A. Slow – onset
- B. Unpalatibility of certain drugs
- C. Not useful in cases of vomiting
- D. Not useful for unconscious and non-cooperative patients
- E. Destroyed by digestive juice
- F. Uncertain absorption



- ▶ **Parenterals:**
- ▶ **Par- beyond: eternal – intestine**

Advantages:

- a. Rapid action
- b. Accuracy
- c. No drug destruction through digestive juice
- d. Effective in cases of vomiting
- e. Effective in unconscious and non-cooperative patients also
- f. No-gastric irritation

► **Disadvantages –**

1. Less safe
2. More expensive
3. Self administration is difficult
4. Danger of infection
5. Injury to blood vessels and nerves

► **A] Inhalations:**

Administration as dry powders, nebulized particles and vapours.

► Eg. Anaesthetic gases, Salbutamol

Advantages:

- a. Quick absorption
- b. Rapid effect both systematically and locally

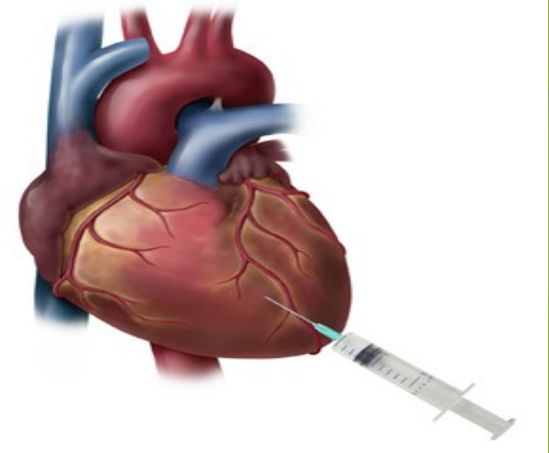
Disadvantages:

- c. Increased respiratory secretions
- d. Cardiac toxicity, local irritations



B| Injections

- a. Intra-dermal – Into the layers of skin
- b. Intra-Muscular- Into the muscles
- c. Intra -Venous- Into the veins
- d. Intra-Arterial- Into the arteries
- e. Intra-Thecal – Into the thecal covering of spine
- f. Intra-Peritoneal –Into the peritoneum
- g. Intra-Medullary – Into the bone marrow
- h. Intra-Articular – Into the joints
- i. Intra-Cardiac - Into the heart



TRANS –MUCOSAL

A. Sub-lingual – Rapid Action, Quick degradation and
Dissolution

B. Trans-nasal

C. Trans-rectal- A. Suppositories

B. Enema



Retention
Evacuation

D. Trans-vaginal- A. Pessaries

B. IUCD (intrauterine contraceptive
device)



THANK YOU.....