

Shri Mallikarjun Vidyavardhak Sangh's Smt. Rajeshweari Karpurmath Memorial (RKM) Ayurveda Medical College, Hospital & P.G. Research Centre, Vijayapur.

CLINICAL RELEVANCE OF AUSHADHA SEVANA KAALA

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INTRODUCTION

• Acharya charaka mentions while treating any disease, one should consider Desha, kala pramana, satmya, asatmya, pathya and apathya to get desired outcome of any treatment .

देशकालप्रमाणानां सात्म्यासात्म्यस्य चैव हि। सम्यग्योगोऽन्यथा ह्येषां पथ्यमप्यन्यथा भवेत्।। cha chi 30/293

- Aushadha sevaa kala / Bhaishajya kaala is one of the important principle to be considered while treating the diseases .Among above mentioned seven factors, Kaala has been given 2nd place which reflects the importance of kaala (Bhaishajya kaala) in treatment.
- Kaala is cosidered as nimitta karana(reason) for all the types of karya(action).
- Synonyms: Bhaishajya kaala, Bheshaja kaala, Bhaishajya grahana kaala, Aushadha avachaarana kaala. Agada kaala.

FACTORS DECIDING AUSHADHA KAALA

- Potency of the drug
- Tolerance capacity of the person
- Pathological process of the disease

SHADVIDHA KAALA OF ACHARYA CHARAKA

- Dina Aveksha Kaala (based on different times of the day : morning ,noon ,evening or night)
- Atura Aveksha Kaala (depending of different patient : like different prakruti etc)
- Bheshaja Aveksha Kaala (depending on different types of medicine)
- Vyadhi Aveksha Kaala (different diseases)
- Jeernalinga Aveksha Kaala (different time of digestion of food or medicie)
- Rutu Aveksha Kaala (different ritu)

दिनातुरौषधव्याधिजीर्णलिङ्गर्त्ववेक्षणम् । कालं विद्याद्दिनावेक्षःcha chi 30/296

Number of different Aushadha sevana kaala by different Acharya

10 kaala : Charaka Samhitha (cha chi 30/297)
Sushruta Samhita (Sush utt 64/65)
Ashtanga Hridaya (Ash Sut 13/37)
Kashyapa samhita (Ka kila 3/34)

- 11 kaala : Ashtaga Sangraha (Ash sang sut 23/12)
- **05 kaala :** Sharangadhara samhita (Purva khanda 2/1-12)

VAGBHATA



SUSHRUTA









चरकसंहिता चिकित्सास्थानम् - ३०. योनिव्यापच्चिकित्सितम्

दिनातुरौषधव्याधिजीर्णलिङ्गत्ववेक्षणम् 🛽 । कालं विद्याद्दिनावेक्षः पूर्वाह्णे वर्मनं यथा।।२९६।। रोग्यवेक्षो यथा प्रातर्निरन्नो बलवान् पिबेत्। भेषजं लघुपथ्यान्नैर्युक्तमद्यात्तु दुर्बलः।।२९७।। भैषज्यकालो भुक्तादौ मध्ये पश्चान्मुहुर्मुहुः। सामुद्गं भक्तसंयुक्तं ग्रासग्रासान्तरे दशा। २९८।। अपाने विगुणे पूर्वं, समाने मध्यभोजनम्। व्याने 🕙 तु प्रातरशितमुदाने भोजनोत्तरम्।।२९९।। वायौँ प्राणे प्रदुष्टे तु ग्रासग्रासान्त्रिष्यंते। श्वासकासपिपासाँसु त्ववचार्यं मुहुर्मुहुः।।३००।। सामुद्गं हिक्किने देयं लघुनाऽ क्रेन् संयुतम्। सम्भोज्यं त्वौषधं भोज्यैर्विचित्रैररुचौ हितम्।।३०१।। ज्वरे पेयाः कषायाश्च क्षीरं सर्पिविरेचनम्। षडहे षडहे देयं कालं वीक्ष्यामयस्य च।।३०२।। क्षुद्वेगमोक्षौ लघुता विशुद्धिर्जीर्णलक्षणम्। तदा भेषजमादेयं स्याद्धि दोषवदन्यथा।।३०३।।

युञ्ज्यादनन्नमन्नादौ मध्येऽन्ते कवलान्तरे। ग्रासे ग्रासे मुहुः सान्नं सामुद्गं निशिचौषधम्।।३७।।

सम्प्रत्यौषधकालान् दर्शयन्नाह - - - -

अष्टाङ्गहृदयम् सूत्रस्थानम् - १३. दोषोपक्रमणीयाध्यायः

अत ऊर्ध्वं दशौषधकालान् वक्ष्यामः । तत्राभक्तं ^[8] प्राग्भक्तमधोभक्तं मध्येभक्तमन्तराभक्तं सभक्तं सामुद्गं मुहुर्मुहुर्ग्रासं ग्रासान्तरं चेति दशौषधकालाः ।।६५।।

सुश्रुतसंहिता उत्तरतन्तम् - ६४. स्वस्थवृत्ताध्यायः

Abhakta(Niranna)

DESCRIPTION:

•Ananna, Nirbhukta, Suryodaye Jaate are the synonyms of the above Kaala. Chakrpaani - It should be given before meals in the morning.

- Hemadri Aushadha is given after digestion of food.
- Indu It should be given after one Yaama(three hours)after sunrise.

Contra Indications:

Baala, Vriddha, Vanita, Mridu persons in order to avoid glani and bala kshaya. Activity of Aushadha:

- Highly potent due to No Contact of Aushadha with food.
- Aushadha Virya Unchanged.
- Agni & Aushadha Interaction unobstructed due to absence of food

Pragbhakta: Administered before meals.

DESCRIPTION:

•Prak Bhojana, Bhojana Agre, Poorva Bhaktashaya, are the synonyms. <u>Activity of Aushadha</u>:

Ashupaka of Aushadha

No balakshaya, as the food follows the Aushadha.

No mechanical expulsion of Aushadha, due to intake of food.(Urdhwagati Pratibandha).

Indications:

a. Apana vayu vikruti

b. Vriddha, Shishu, Bheeru, Krisha

Adhobhakta Kala :Bheshaja is administered after meals (after lunch & dinner).

DESCRIPTION:

•Hemadri & Indu- Aushadha is to be administered immediately after meals.

- Vyanavikruti- Aushadha is administered after lunch.
- Udanavikruti- Aushadha is administered after dinner.

Indications:

Dosha- Vyanavayu Vikruti, Udanavayu Vikruti

Disease-

Vyanavayujanya- napunsakata, debility, shopha, jvara, depression, body ache, tingling, numbness, kushtha, visarpa. Udanavayujanya- throat-infections, depression, chhardi, aruchi, pinasa, galaganda, urdhvajatrugata vyadhi, karshya.

Activity of Aushadha:

The Udanavayu fascilitates the urdhvagati of Aushadha, thereby strengthening the upper parts of body esp. the sense organs.

Madhyabhakta Kala : Aushadha is administered in between meals

DESCRIPTION:

•Chakrapani & Indu- 50% food intake \rightarrow Aushadha \rightarrow remaining food intake.

Indications:

- •Dosha- Samanavayu Vikruti, pitta vikruti
- •Agni- Mandagni
- Diseases- Koshthagatavyadhi, Pakvashayagata vyadhi, Shula, Gulma, Grahani

Activity of Aushadha:

- Bheshaja- acts locally & eradicates the Sthanic doshas.
- •Stimulaton of the Samana vayu.

Antar Bhakta : Administration of food between two meals.

DESCRIPTION:

Previously consumed food is digested, Aushadha consumed; after metabolism of Aushadha, again food is taken in the evening.

Indications:

Dosha- Vyanavayu Disease-

Vyanavayujanya- napunsakata, kshaya, shopha, jvara, depression, body ache, tingling, numbness, kushta, visarpa.

Activity of Aushadha:

It shows Hrudya, Pathya, Deepana & Manobalakara effect.

Sabhakta Kala : Aushadha is given mixed with food.

DESCRIPTION:

Indu-Bheshaja is processed or cooked along with food or it is given with food. *Indications:*

Disease- Arochaka, aruchi, sarvangasamshrita vyadhis

Patients- sukumara, vriddha, baala, debilitated patients & those who exhibit unpalatability to medicines.

Activity of Aushadha:

To potentiate the Agni-Bala.

Samudga Kala : Bheshaja is administered immediately before & after food.

DESCRIPTION:

Indu, Hemadri-- Bheshaja should be consumed immediately in relation to food. Bheshaja acts as a Samudga (Box) for Ahara.

Indications:

Dosha- Vyana-Apana-Udanavayu

Type of Dravya- Pachana, Avaleha, Churna

Disease- Hikka, Kampa, Akshepaka, Vataja Prameha, Shukradosha.

Patients-a patient who consumes

light food.

Activity of Aushadha:

Corrects gati vikruti of Vata dosha by promoting anulomana of Vata dosha Promotes Urdhva & Adhara Gati of the drug.

Muhurmuhu : Aushadha is repeatedly taken with or without food.

DESCRIPTION:

Bheshaja is frequently administered irrespective of Bhukta or Abhuktavastha.

Indications:

Disease-

Pranavahastrotogata Vyadhi-- Shvasa, Kasa, Hikka Udakavahastrotogata Vyadhi – Trishna. Annavahastrotogata Vyadhi -- Chardi, Visha <u>Activity of Aushadha</u>:

Sublingual absorption provides faster relief. High concentration of drug provides more bio-availability. Treats the vitiated doshas in their Sanchaya & Vegavastha.

Grasa : Grasa means mixed along with each bolus of food.

DESCRIPTION:

Arunadatta, Hemadri—Bheshaja is to be mixed with each morsel of food. *Indications:*

Dosha- Pranavayu

Agni- To stimulate Agni

Disease- Pranavayuvikruti (Pinasa, Ardita, trusha, Shvasa)

Bheshaja- Vajikarana Bheshaja (Churna, Leha, Deepana Dravya, Vati, Guti)

Activity of Aushadha:

Sagrasa Bheshaja facilitates absorption of the bheshaja right from the buccal mucosa.

High concentration of drug in systemic circulation offers rapid onset of action.

Grasantara :

Grasantara means adminstration of Bhaishaj in between each bolus of food

<u>Activity of Aushadha:</u>

It helps in correcting the gati vikruti of Vata dosha by promoting anulomana of Vata dosha. <u>Indications:</u> Dosha-Pranavayuvikruti Type of Dravya- Leha Disease- Pinasa, Ardita, Trisha, Shwasa, Hrudroga **Nishi :** Administration of *Aushadha at night after digestion of consumed food*

DESCRIPTION:

Indu (A.S.Su.23/18)- Nishi Kala is the time after evening meal is digested and 3 hours have passed.

Sharangadhara-Anannavastha

Indications:

Dosha-Kapha Type of Dravya- Pachana, Shamana Disease- Urdhvajatrugata Vyadhi Purpose- Lekhana, Brahmana (Sa. S.P.1)

<u>Activity of Aushadha:</u>

Selective action of the Aushadha towards the urdhvajatrugata anga because the Adhara gati of drug is prevented by food

TYPES OF AUSHADHI DRAVYA AND BHAISHAJYA KAALA

Rasayana Aushadhi – Abhakta (Pratah Kaala)
Vajeekarana Aushadhi – Grasa Kaala

AS EXPLAINED BY ASHTANGA SANGARAHA

SL NO	METHOD OF ADMINISTRATION	INDICATION
01	ABHAKTA(WITHOUT FOOD)	Diseases of kapha origin, in severe ailments
02	PRAGBHAKTA(BEFORE FOOD)	In vitiation of Apana vayu
03	MADHYABHAKTA(IN BETWEEN FOOD)	In vitiation of Samana vayu
04	ADHOBHAKTA(AFTER FOOD)	In vitiation of Vyana and udana vayu
05	SABHAKTA(BLENDED WITH FOOD)	In bala and conditions like Aruchi
06	ANTARBHAKTA(IN BETWEEN TWO MEALS	In vitiation of Samana vayu
07	SAMUDGA(BEFORE AND AFTER MEALS)	In conditions like Kampa, Apshepa, Hidma
08	SAGRASA(WITH EACH BOLUS OF FOOD)	In vitiation of Prana vayu
09	GRASANTARA(BEFORE EACH BOLUS OF FOOD)	In vitiation of Prana vayu
10	NISHI (NIGHT TIME)	Urdwajatrugata vyadhi

FEW EXAMPLES

SLNO	DRAVYA	KALA	INDICATION
1	VARUNADI KWATHA	PRAGBHAKTA	MUTRAKRICHRA
2	NAGARADI KWATHA	ADHOBHAKTA	MANDAGNI
3	DASHAMOOLA KWATHA	MUHUR MUHUR	SHWASA
4	PATHYADI SHADANGA KASHAYA	NISHI	SHIRASHOOLA
5	ASHWAGANDHARISHTA	ADHOBHAKTA	DEEPANA PACHANA
6	KANAKASAVA	MUHURMUHUR	KASA, SHWASA
7	ERANDA TAILA	ABHAKTA	VIRECHANA
8	TRIPHALA GRITHA	SAGRASA	NETRA ROGA
9	PANCHA GAVYA GRITHA	ADHOBHAKTA	UDARA ROGA
10	RASONA KALKA	MUHUR MUHUR	CHARDI
11	CHAVANAPRASHA AVALEHA	PRAGHBHAKTA	AGNIMADYA
12	ARDRAKA AVALEHA	SAMUDGA	НІККА
13	KUSHMANDA AVALEHA	ADHOBHAKTA	RAKTAPITTA
14	TRIVRIT AVALEHA	ABHAKTA	VIRECHANA 22

PUSHYNUGA CHURNA	PRAGBHAKTA	PRADARA
SHRINGADI CHURA	MUHUR MUHUR	SHWASA
SWADISHTA VIRECHANA CHURNA	NISHI	VIBHANDA
HINGWASHTAKA CHURNA	SAGRASA	AGNIDEEPANA
PIPPALI CHURNA	SAMUDGA	НІККА
ICHABEDI RASA	ABHAKTA	VIRECHANA
CHITRAKADI VATI	PRAGHBAKTA	AJEERNA
BILWADI VATI	MUHUR MUHUR	VISHA
MAHASHANKA VATI	ADHOBHAKTA	UDARASHOOLA
SHWETA PARPATI	PRAGHBHAKTA	MUTRAKRICHRA
ABRAKA PARPATI	MUHUR MUHUR	SHWASA
RASONA KALKA	MUHURMUHUR	CHARDI

CHRONOTHERAPY/ CHRONOPHARMACOLOGY :

Co-ordinating biological rhythms (Chronobiology) with medical treatment is called chronotherapy. It is the science concerned with variations in the pharmacological actions of various drugs over a biological timings and endogeneous periodicities.

Pharmacology : Pharmacon-Drug, Logos-Study. It deals with the interaction of administered chemical molecule with the living system.

Chronobiopharmacology: Chronos-Time, Bios-Life, Logos-Study. The science which deals with the phenomenon of cricadian rhythmicity in living organisms.

Biological rhythm /Circadian Rhythm is a self-sustaining oscillation with the duration of time between the successive repetitions . Circadian clock in the brain co-ordinates daily physiological cycles I like sleep/awakw, temprature, digestio, hormones. Circadian rhythms are particularly important in medicines

Additional factors to 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
 - (Ex: eating times and sleep patterns)

Utility of CHRONOTHERAPY

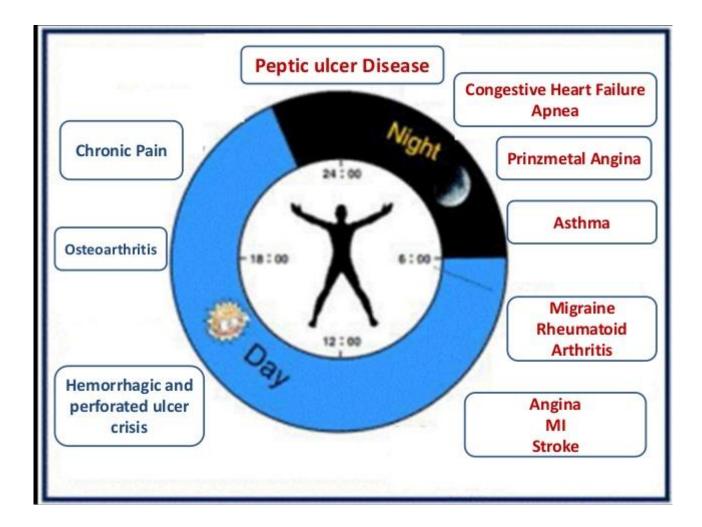
- Maximize effectiveness and minimize side effects
- Makes the drug more bio available

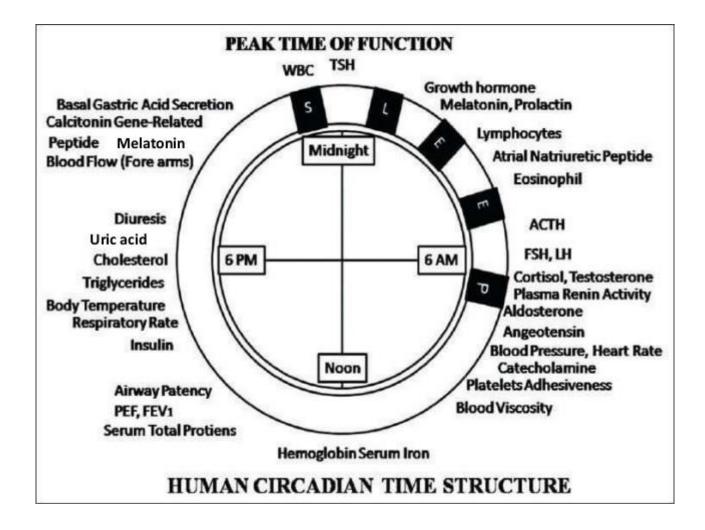
APPLICATIONS.

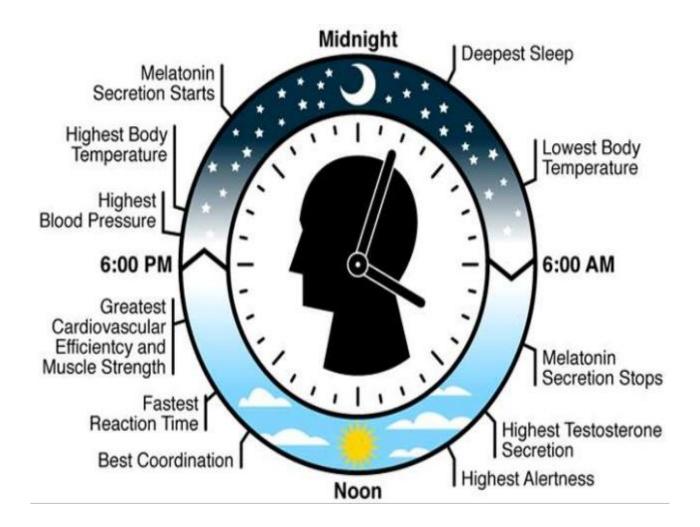
In the treatment of certain disorders like :

≻Asthma

- ≻Cancer
- >Hypertension
- ➤Multiple type of depression
- ➤Seasonal affective disorders
- ➢Bipolar disorders







To sum up : Most knowledge of medications has been derived from single- and multiple-dose investigations in which pharmacokinetic and pharmacodynamic phenomena have been evaluated following one, usually, daytime drug administration. Chronopharmacologic studies involving the evaluation of such phenomena after each of several different clock-hour treatments during the day- and nighttime reveal that biological rhythmic processes, such as those of 24 hr, can profoundly affect the kinetics and effects of various medications. Several new concepts have arisen based on findings from chronopharmacologic investigations, such as chronokinetics, chronesthesy and chronergy. These are defined and discussed herein using illustrative examples. A major goal of chronopharmacologic research is to devise chronotherapeutic interventions. Chronotherapeutics is the optimization of drug effects and/or minimization of toxicity by timing medications with regard to biological rhythms. Chronotherapeutics takes into account predictable administration-time-dependent variation in the pharmacokinetics of drugs as well as the susceptibility of target tissues due to temporal organization of physiochemical processes and functions of the body as circadian and other rhythms

Thank you!!!

Any Query.....???

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