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# **REVIEW ARTICLE**

# Concept of Kala-Prakarsha in Ayurveda

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## ABSTRACT

Every matter undergoes a change with time that is considered as *Parinama* (outcome) in *Ayurveda*. When this time is protracted in such a way, that these outcome cultivates a fruitful result under some specific conditions, it is known as *Kala-Prakarsha* or it can be said that *Kala* becomes *Kala-Prakarsha*. *Kala-Prakarsha* is also one of the major *Samskara* responsible for transformation having its utility in almost all pharmaceutical processings. Ayurveda advocates certain procedures like *Kala-Prakarsha* (curing) for certain drugs before their administration. *Bhallataka* (*Semecarpus anacardium* Linn.) is one such drug, which is to be processed through curing procedure. There are several examples available in classical texts about *Kala-Prakarsha* whereby applying this *Samskara*, enhancement of the drug potency is achieved. Considering this, it is planned to evaluate most of the examples present in texts by which exploration of different procedures of drug potency advancement can be elucidated.

# Key words: Bhallataka, curing, Kala-Prakarsha, Semecarpus anacardium

# INTRODUCTION

Everything has to undergo a change. It is the only unchangeable fact and everything else in this universe is in a continuous process of changing. The changes happening continuously and naturally in any Panchbhautika substance are due to Agni Mahabhuta present in it or more precisely it can be said due to the presence of Bhutagni in all the substances. It is responsible for the changes transformation of energies present or in substances.

When this transformation is done in a proper way under controlled conditions to get expected results, it is termed as *Samskara*. In present days of globalization; all the rational skeptics are engrossed in finding the basic reasons for transformations.

*Kala-Prakarsha* is also one of the major *Samskara* responsible for transformation having its utility in all most all pharmaceutical processing.

#### Background:

Every matter undergoes a change with time that is considered as *Parinama* (outcome) in *Ayurveda*.<sup>1</sup> But when this time is protracted in such a way, that this outcome cultivates (*Samskara* cultivates<sup>2</sup>) in a fruitful result under some specific conditions, it is known as *Kala-Prakarsha* or it can be said that *Kala* becomes *Kala-Prakarsha*.

Term *Kala-Prakarsha* can be correlated with term curing.

## **Cure** <sup>[3]</sup>

The term "cure" is derived from the Latin *curare*, meaning *to take care of*.

- End a condition or problem by treatment or remedial action.
- Restoration to health, to the state of being healed, or cured.
- Preserve by salting, drying or smoking.

Curing<sup>[4]</sup>

• Curing is any of various food preservation and flavoring processes especially of meat, fish and vegetables by the addition of a combinations of salt, nitrates, nitrites or sugar.

- The use of dehydration of food was the earliest form of food curing.
- But here the term curing is used for "Preservation process with take care off".

## Kala and Kala-Prakarsha:

Charaka has described Kala and Kala-Prakarsha independently while describing the Samskara<sup>5</sup> so there is certain difference in between them. Time changes everything in this entire world and all the substances reach different ends by the time factor<sup>6</sup> so that *Kala* is commented as *Bhagwana* (God) by Acharyas<sup>7</sup>. Under the time factor both deterioration and improvising of tastes (Rasas) creation takes place<sup>8</sup>. When this "Rasanama<sub>I</sub> Sampanata" takes place means all the expected qualities comes beneath the time then this time which incorporate with excellence qualities is denoted as "Kala-Prakarsha". As righty quoted by Acharva Sharangdhara, that, after one year drugs doesn't maintain its qualities due to Time factor<sup>[9]</sup>.

"Due to time factor both deteriorated or excellence qualities emerge but when outcome cultivates in an expected fruitful result by the time only then it is termed as *Kala-Prakarsha*."

Specific protracted time, certain specific II. conditions and specific matter inside material is to be placed are prerequisites by which one can convert *Kala* as a *Kala-Prakarsha* 

## Specific protracted time:

*Kala* drags all the things in this existing nature but results are not as expected every time but when specific duration is given for the traction of time and desired results are obtained, that time period can be correlated with *Kala-Prakarsha*.

If specific time (age) is described for a specific functioning, that means in that given protracted time period, properties are of highest degree of eminence to perform that function. So that duration in which properties has become par-excellence is also one of the factors for *Kala-Prakarsha*.

**Examples** – If 16yrs age for *Maithuna* (Mating) is advocated, then at that time potency of semen is of excellent quality so 16 yrs is the time of *Kala-Prakarsha* and of after 70 yrs *Maithuna* is prohibited so it is *Kala-Apkarsha*.<sup>10</sup>

## Certain specific conditions -

Environmental influences the surrounding of the object under observation, so specific controlled temperature at which properties are induced in the drug is to be maintained for *Prakarsha* (Proliferation or maturation) – This is the auspicious condition for rejuvenation i.e. on that environment *Divya-Aushadhis*<sup>11</sup> (Divine herbs) mature with *Virya* (potency). So a specific condition on which maintenance of the qualities or increasing the properties is also one of the generating factors for *Kala-Prakarsha*.

## Specific Storage matter/heap –

Heap of specific grain/matter is used for the maintenance of temperature or providing specific condition to the drug. By which propagation of transcendence comes inside the drug. Some examples are quoted for this heap/matter in classics like inside earth<sup>12</sup>, Inside Ash<sup>13</sup>, heap of Barley/*Masha*<sup>14</sup> etc. are described.

## Examples of *Kala-Prakarsha* in Ayurvedic texts: • Typical examples:

Table 1: showing examples of Kala-Prakarsha quoted in Brihat-Trai texts

No	References	Formulation	Nidhapana	Kala-Prakarsha	Pg. no.
1.	C.C.1-2/7	Amalakavaleha	Earthen pot in earth	6 months	381
2.	C.C.1-2/8	Amalakachurna	Earthen pot in Bhasma Rashi	Pravata – Varshante	382
3.	C.C.1-2/9	Vidangavaleha	Earthen pot in Bhasma Rashi	Pravata – Sharada	382
4.	C.C.1-2/10	Amalakavaleha Apara	Earthen pot	21 days	382
5.	C.C.1-2/13	Bhallataka Kshira	Yavapalle-Masha palle	4 months	382
6.	C.C.1-3/18	Lauhadi-Rasayana	Yavapalle	1 year	384
7.	S.C.27/8	Vdanga-Tandula yoga	Bhasma Rashi	4 months	499
8.	S.C.28/3	Bakuchi-Rasayana Yoga	Dhanya Rashi	7 nights	500
9.	A.S.U.49/58	Bhallataka Ghrita Prasha	Dhanya Rashi	7 nights	919
10	A.H.U.39/26	Haritakyadi Rasayana	Bhumao Nidhaya	6 months	923

C.C. – Charaka Chikitsa Sthana<sup>15</sup>, S.C. – Sushruta Chikitsa Sthana<sup>16</sup>, A.S.U. – Astanga Samgraha Uttartantra<sup>17</sup>, A.H.U. – Astanga Hridaya Uttartantra<sup>[18]</sup>

#### • Kala-Prakarsha in Asava-Arishta:

Table 2: Showing	examples	of Kala-Prakarsha	about Asava-Arishta
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S. No	References	Formulation	Nidhapana	Kala-Prakarsha	Pg. no.
1	C.C.7/78	Kanakabindu-Arishtama	Dhanyamadhye	1 month	454
2	C.C.12/35	Punarnavadyarishta	Palle-Yavanam	1 month	485
3	S.C.6/14	Dwipanchamuladyarishta	Yavapalle	1 month	433
4	A.S.C. 14/16	Loharishta	Yavapalle	3-4 months	516
5	A.H.U.39/77	Amritarasapaka	Sthapyam-dhanye	7 days	928

#### • Kala-Prakarsha in clinical view:

Table 3: showing examples of Kala-Prakarsha about clinical view

No.	References	Formulation	Kala-Prakarsha	Pg. no.
1.	C.C.1-3/32 Pippali-Rasayana		Samamekam-Prayojayeta (1 Yr.)	385
2.	C.C.1-3/47	Triphala-Rasayanamaparam	Samvatsara-Prayogena (1Yr.)	385
3.	S.C.7/19	Trikantakadya churna	Saptaham-Ashmaribhedanam(7 days)	436
4.	A.S.C.19/27	Manibhadra Guda	Masamashesha (1 month)	551
5.	A.H.C.3/125	Nagbaladi Ghirta	Shadamasana	597

#### • Kala-Prakarsha in Shelf-Life:

#### Table 4: Showing examples of Kala-Prakarsha about shelf life

S. No	References	Formulation/Kalpana	Kala-Prakarsha	Pg. no.
1	Shr.M.1/51	Churna	Before 2 months	13
2	??	Gutika & Leha	Before 1 year	13
3	??	Taila & Ghrita	Before 16 months	13
4	22	Laghupaka-Aushadhi	Before 1 year	13
5	B.P.N Taila varga-12	Pakwam ghritam	Before 1 year	764

Shr.M.- Sharangdhara Madhyam-Khanda<sup>19</sup>, B.P.N.- Bhava Prakasha Nighantu<sup>20</sup>

#### • Kala-Prakarsha in Indriya-Sthana:

#### Table 5: showing examples of Kala-Prakarsha about Arishta Lakshana

S. No	References	Lakshana	Kala-Prakarsha	Pg. no.
1	1 C.I.4/11 Neelam, Nishaprabham Agni pashyati		Death in 7 days	360
2	C.I. 7/19 Samshrstya Vyadhyao Pratilomanulomaga		Death in 15 days	366
3	C.I. 9/20	Pittamushmanugam shankhao Prapyam	Death within 3 days	368
4	C.I. 9/22	Balamamsakshaya Tivro Arochaka	Death in 1 <sup>1/2</sup> month	368
5	C.I.11/7	Bhakti, Sheela, Smriti, Tyaga, Buddi, Bala, Nashta	Death in 6 months	370

C.I. – Charaka Indriya Sthana

#### • Kala-Prakarsha in Rasa-Shastra and Bhaishajya Kalpana:

Table 6: s	howing examples of <i>Ka</i>	<i>ila-Prakarsha</i> about p	oharma	ceutical view	
C NL	D	Desident			

S. No	References	Description	Samskara /Bhavana	Kala-Prakarsha	Pg. no.
1	R.H.T. 2/3	Parada Shodhana	Swedana	3days	20
2	R.R.S. 20/89	Arogyavardhani Vati	Bhavana	2days	252
3	A.P. 1/52	Parada Samskara	Mardana	3days	42
4	A.P. 1/397	Rasasindura Nirmana	Jarana	3days	194
5	R.T 24	Vatsnabha Shodhana	Shodhana	3days	652

R.H.T. - Rasa Hridaya Tantra<sup>21</sup>, R.R.S. - Rasa Ratna Samucchaya<sup>22</sup>, A.P. - Ayurved Prakasha<sup>23</sup>, R.T. - Rasa- Tarangini<sup>24</sup>

#### DISCUSSION

The process or tool by which Dravya is modified as required is termed as Samskara i.e. qualitative alteration done for improvement, enhancement, modification, lowering bad effects by the processing, creation, propagation, and any procedure or by some pharmaceutical treatment. Charaka Samhita quotes description about Samskara mainly at two places first while describing the *Paradi Guna*<sup>25</sup> i.e. the qualities useful for treatment and second during the Ashta Aaharavidhi Vishesha Ayatana<sup>26</sup>at both the places, synonym Karana is used. Karana means the processing/transformation of the inherent attributes of substances. Transformation of the properties is effected by dilution, application of heat, cleansing, churning, storing, maturing,

flavoring, impregnation, preservation, and container.

During the creation, due to the particular mode of combination of *Mahabutas* some attributes are manifested. At the level of *Panchamahabhutas*, *Prithvai* is a substratum or *Adhara* for all the processes of *Samyogavibhaga* and *Akasha* is providing space for that. Remaining three *Mahabhutas*, namely *Jala*, *Agni* and *Vayu* help for transformations or changes taking place in a substance.

In the process of evolution of *Mahabhutas*, sequence of evolution is

AKASHA → VAYU → AGNI → JALA → PRITHAVI

Here Agni Mahabhuta is having its place right in the middle, showing role in the transformation of Continuous Mahabhutas. changes or transformation process are taking place due to presence of Agni Mahabhuta in it. The Agni present in Dravyas is called Bhutagni. This Bhutagni is responsible for changes viz.: after one year all types of Dhanya become Pathya and Lagutar $a^{27}$  due to perpetual catabolism process is going in all the substances and the role of Samskara starts from here. With the help of Samskara either this process/rate of transformation enhances or ceases. Hence. Charaka has said that due to the factor of Samvoga, Vishlehsa, Kala, Samskara and Yukti synergism occurs and vice-versa<sup>28</sup>. So factors, which are known to affect the Samskara, only help to adjusting/transformation the position of Mahabhutas.

In *Rasashastra* concept of *Bhavana* again justifies the *Mahabhuta* concept. *Bhavana* promotes the *Agni* and *Jala Mahabhuta* so that alteration in attributes occurs and hence most of the *Acharyas* stated about continuous *Bhavana* because it may be the reason that due to *Bhavana* space is created (*Akasha*) and then addition of *Jala Mahabhuta* creates desired characters, so *Samskara* is also known as *Gunantararopanam*<sup>[29]</sup>.

In this, present topic Kala-Prakarsha is the factor which either enhances or maintains the properties of substances. Since due to Kala everything gets transformed, either deteriorates or improvised because Kala has no limitation but Kala-Prakarsha only works when some specific condition setup like duration of treatment, influencing surroundings condition and environment in which the contact of substance taking place. (Table 1) Bhallataka is one of the example where concept of Kala-Prakarsha is given moreover it is probably only drug where direct contact of specific storage matter is advised. Keeping in this specific matter (Barley) may be the reason to maintain the temperature pattern and excluding all the factors which affects the transformation (Bhutagni) process and hence the qualities of substance remains intact or gets enhanced.

# CONCLUSION

On reviewing the texts about *Kala-Prakarsha* it is evident that if particular drug is selected for treating a specific disease and administered over a stipulated time period, then it certainly induces some specific qualities in that person. Likewise shelf life can also come under the context of *Kala-Prakarsha*. From Pharmaceutical point of view one can see many examples of *Kala-Prakarsha* like *Bhavana* for two days, or *Swedana* for three days which imparts some eminent qualities in that particular substance.

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