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**Review Article Open  Access**

**Unique Philosophy of Pratinidhi Dravyas and its Clinical considerations: Needs of Current Scenario**

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**Abstract**

*Pratinidhi dravyas* means drug substitutes used in place of original drug which is *Abhav dravya* (unavailable). The *Abhav* and *Pratinidhi* drugs should possess similar *Guna* and therapeutic activities, so that *Pratinidhi dravya* can be used in place of *Abhav dravya* for similar therapeutic purposes. *Pratinidhi dravya* used in case of unavailability of drug may be due to the loss on habitat, over exploitation of natural sources and selection of rare plant species. The concept of *Pratinidhi dravyas* not only resides around the substitution of plant based drug but precious gems and stone can also be substituted with their cheaper substituent to retain similar therapeutic properties as like replaced gems and stone. However the Ayurveda literature suggested utilization of *Pratinidhi dravyas* on the basis of rationale reasoning after consideration of effects and side effects of *Pratinidhi dravyas.* The modern and ancient sciences briefed about the drug substitution to achieve the desired effects. Considering clinical significance of this fact present article summarizes various aspects of *Pratinidhi dravyas* and their clinical importance.

**Keywords:** *Ayurveda, Pratinidhi dravyas, Abhav dravya, Guna, Substitute, Unavailability*

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**1. Introduction**

The concept of drugs substitution described in traditional texts as concept of“*Pratinidhi Dravyas*”. The *Pratinidhi Dravyas* used in absence of main drugs (*Abhav Dravya*) after the consideration of *Guna* of both drugs. There are some Ayurveda drugs which not available easily or difficult to procure and some drugs only available in specific season, in such types of conditions the drug possessing similar therapeutic action can be used as ingredients of natural formulations. Substitute drugs with similar pharmaco-therapeutic activity reffered to *Pratinidhi Dravyas* can helps to overcome the problem of unavailability of *Abhav Dravya.* (1-4)

Ayurveda explored therapeutic utilization of plant, animal, mineral and metal, etc. sources. The excessive exploitation of natural sources causes unavailability of important plants and climatic changes also affects availability of few plants; moreover seasonal specificity leads requirement of needed drug substitution. The Ayurveda concept of *Pratinidhi dravyas* overcomes problem of unavailability of important natural medicines. (4-7)

The needs of Pratinidhi Dravya arise due to the following conditions:

* Geographical and seasonal variations
* Unavailability of the original drug
* Lack of biodiversity
* Difference in natural habitat
* Over-exploitation of natural sources
* Modernization of civilization, etc.

The Ayurveda classics i.e.; *Bhaishajya* *ratanavali,* *Yoga ratanakara* and *Bhavaprakasha*, etc. described various aspects of drug substitution with the retention of pharmacologicalproperties. The *Rasa, Guna, Vipaka* and *Virya* of both *Abhav* and *Pratinidhi Dravyas* play important role towards the success of drug substitution. The *Karma* of *Pratinidhi Dravya* mainly considered during the process of drug substitution. The **Figure 1** also depicted important factors need to be considering during the implementation of concept of Abhava-Pratinidhi Dravya.

**Figure 1.** Factors which affects selection of Pratinidhi Dravya instead of Abhava Dravya

With regards to the classical Ayurveda formulation it is clearly mentioned that *Pradhana Dravya* should not be substituted in a formulation; however other supportive ingredients other than main therapeutic agent (*Pradhana Dravya*) can be replaced with *Pratinidhi Dravya* if required. The replacement of main therapeutic agent (*Pradhana Dravya*) may affect therapeutic quality of formulation. (6-8) The ideal *Pratinidhi Dravyas*should possess some desirable properties as mentioned in **Table 1**.

**Table 1.** Properties of *Pratinidhi Dravyas*

|  |  |
| --- | --- |
| S. No. | Desirable properties of *Pratinidhi Dravyas* |
| 1 | Similar pharmacological actions of that drug being replaced |
| 2 | Easily available, so procurement not become difficult whenever required |
| 3 | Should be cheap or not too expensive  |
| 4 | Easy to incorporate in desired formulation |
| 5 | Should not cause harmful effects or undesirable side effects.  |
| 6 | Compatible with other ingredients of formulations  |

**2. Clinical Importance**

* *Pratinidhi dravya* overcome the problem of unavailability of drug.
* The some drug available in specific season, the concept of *Pratinidhi dravya* make provides an alternative arrangement in such cases.
* This concept is very much useful in case of emergency or in poisoning conditions, when some ingredient of antidote formulation is not available then emergency situation can be handled using the concept of *Pratinidhi dravya.*
* The species or genus variation causes diversity which sometimes may incorporate non-deliberate drug substitution.
* The important formulation cannot be prepared if some supportive drug not available, in such case formulation can be completed using appropriate drug replacement.
* The intentional drug adulteration can be restricted by employing concept of *Pratinidhi dravya* in well documented manner.
* The substitute not imparts harmful effect but retain therapeutic potency as desired.

***Common Types of Drug Substitution***

* Substitution with totally different drug
* Substitution of two different Species
* Substitution of species of same family
* Substitution of different parts of same plant

***Conditions associated with uses of Pratinidhi Dravyas***

* Regional substitutes
* Non-availability of the drug
* Seasonal availability of the part
* Self-life of the drug
* Cost of the drug
* Substitution of drug formulations
* Synthetic substitute
* Substitution with other parts of the same drug

**Table 2.** Examples of *Abhav Dravyas* & their *Pratinidhi Dravyas* (8-12)

|  |
| --- |
| Plants/herbs/natural drugs category |
| *Abhav Dravya* | ***Pratinidhi dravya*** |
| *Kankola* | *Jatipushpa* |
| *Varahikanda* | *Charamkaralu* |
| *Nagakesar* | *Padmakesar* |
| *Jatipushpa* | *Lavanga* |
| *Daru haridra* | *Haridra* |
| *Draksha* | *Kashmari phala* |
| *Ativisha* | *Mustaka* |
| *Karpura* | *Granthi parna* |
| *Nakha* | *Lavanga* |
| *Bharangi* | *Talisha* |
| *Saurashtra mitti* | *Sphatika* |
| *Arka kshira* | *Arka swarasa* |
| *Dhanvyasa* | *Duralabha* |
| *Neel-utpala* | *Kumuda* |
| *Bakula* | *Kalhara* |
| *Langali* | *Kushtha* |
| *Murva* | *Jingini twaka* |
| *Gaja pippali* | *Pippali mula* |
| *Jivak* | *Ashwagandha* |
| *Ksheerkakoli* | *Varahkanda* |
| *Ahimsra* | *Mankanda* |
| *Aahariya Dravya* Category |
| *Abhav Dravya* | ***Pratinidhi dravya*** |
| *Puran guda* | *Madhu* |
| *Dugdha* | *Mudga yusha* |
| *Shweta khanda* | *Mishri* |
| Minerals & Metals Category/*Rasa dravya* |
|  *Abhav Dravya*  | ***Pratinidhi dravya*** |
| *Suvarnamakshik satva* | *Suvarna bhasma* |
| *Panna bhasma* | *Praval bhasma* |
| *Moti* | *Mukta shukti* |
| *Pukhraj bhasma* | *Abhrak bhasma* |
| *Kanta louha* | *Tikshna louha* |
| *Rasanjana* | *Daruharidra Kwatha* |
| *Makshika* | *Swarna Gairika* |
| *Kantaloha bhasma* | *Teekshna Loha* |
| *Mukta* | *Muktashukti* |
| *Visha Dravya* |
|  *Abhav Dravya*  | ***Pratinidhi dravya*** |
| *Ativisha* | *Musta* |
| *Ativisha* | *Naattu Atividayam* |
| *Musta* | *Nagaramusta* |

**3. Conclusion**

The Ayurveda concept of *Pratinidhi Dravyas* or herbal substitutes is very important now a days since there are many natural drugs becoming non available day by day due to the over exploitation of natural sources. *Pratinidhi Dravyas* can be used as an alternative option for such types of medicines after being consideration of their *Rasa, Virya, Vipaka* and *Guna,* etc. The *Karma* (action) of *Pratinidhi Dravyas* mainly helps to overcome the problem of unavailability of drug. Substitution of the herbal drug is need of current times to fulfill the requirement of natural medicines; however drug substation must be done logically on the basis of properties and effects of *Abhav* and *Pratinidhi dravya.* The uses of *Pratinidhi dravya* well mentioned in traditional texts along with some examples. *Guna* & *Karma* of *Abhav* and *Pratinidhi dravya* are prerequisite considerations while making rationale drug substitution. Non-availability of the drug, self-life, seasonal specificity, cost of drug, regional substitutes, contra indications, availability of synthetic forms and geographical distribution, etc. are factors associated with utilization of concept of *Pratinidhi dravyas.* This article finally concluded that, there is a requirement of exhaustive data base related to the exploration of the concept of *Pratinidhi dravyas* so their uses becomes scientific, logical and rationale to overcome the problem of unavailability of drugs obtained from natural sources.

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**Conflict of Interest**

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**References**

1. Garg S. Introduction, Substitute and Adulterant Plants. Delhi: Periodical Experts Book Agency; 1992. p. 6.
2. Shivcharana Dhyani, Dravyaguna Siddhanta, 2nded. Varanasi: Chukhamba Krishnadas Academy;2003.p. 37.
3. Shivrajan VV, Balchandran I. *Shankhapuspi,* Ayurvedic Drugs and Their Plant Sources. New Delhi: Oxford and I.B.H. Publication; 1999.p.398, 425.
4. Yogratnakara. Purvardha, Abhavavarga/38, Edited and translated by Madham Shetty, Suresh Babu. 1sted. Varanasi: Chowkhambha Sanskrit Series; 2005.p. 122.
5. Sharma PV. Dravyaguna Vijnana. Vol. II. Reprint. Varanasi: Chaukhamba Bharati Academy; 2009.p.198, 612.
6. Krishnagopal, Rasatantrasara and Siddayogasamgraha Prathamakhanda. 18thed. Ajmer: Krisnagopal Ayurved Bhavana; 2010.p.340.
7. Sastri L. editor. Yogaratnakara, reprint ed. Purva ardha, Abhava varga, verse no. 1-29. Varanasi: Chaukhamba Prakashan; 2015.p. 171-173.
8. Shastry L. 7th ed. Varanasi: Chaukhamba Sanskrit Sansthan. Yogaratnakara, with Vidyotini Hindi commentary;2002.p. 171.
9. Yadavji Trikamji achraya, Rasamritam. 1st Edition, Varnasi: Chaukhambha Sanskrit Bhavan; 1998.p 160.
10. Vaghela Bhavesh, Soni Haresh, Shukla Lina. A Concept of herbal Pratinidhi dravyas (Substitute drugs) In Ayurveda, Pharmagene.2013;1(3):85-88
11. Vagbhata. Astanga Hridaya, Paradakar Bhisagacharya Harisastri. Editor. Reprint. Varanasi: Krishnadas Academy; 1998.p.280.
12. Acharya Balakrishna, Srivastav Anupam et.al. Ashtavarga plants – threatened medicinal herbs of North-West Himalaya, International Journal of Aromatic Plants. 2012;2(4):661-676.