ABSTRACT:
Arka Kalpana is the base of many Ayurvedic preparations in this era. It was introduced in Ayurvedic Pharmacy in later part of Samhita period. Ark prakash is the first Ayurvedic classical text in which various kinds of distillation Procedures are mentioned, for preparing ARKA from different type of Dravya for various diseases. Arka Kalpana is correlated with Distillation in modern pharmaceutical practices. According to Ark prakasha, the panchavidha kalpanas include Kalka, Choorna, Rasa, Taila, and Arka. In this context, Arka kalpana is given specific importance and it opines that it has more potency in comparison to the other kalpanas. Due to its increased potency, reduced dose, better shelf life, easy absorption, fast action and patient compliance, Arka kalpana is first choice in growing demand among current population. So there arises a need to know the simplified procedures and methodologies involved in the preparation of this formulation in the field of Shalakya. The pharmaceutical aspects regarding this formulation have been explained in detail with specific importance to the yantras, patras, agni and different method of preparation based on the consistency of dravyas. Being a shalaki, we can consider t Ark kalpana is playing major role in the Ocular therapeutics.

KEY WORDS: Arka, Distillation, Ocular therapeutics

INTRODUCTION:
Arka kalpana is now days famous Kalpna among the Ayurvedic formulations. In all Netrarogas, the eye drops play always the major role. Modern ocular therapeutics is always in the search of preservative free eye drops. Especially in the Dry eye syndrome, preservative free eye drops always in demand. The Arka kalpana will give us the major mile stone in the preparation of preservative free herbal eye drops.

Arka is a liquid preparation obtained by distillation of certain liquids or of drugs soaked in water using the Arka yantra or any convenient modern distillation apparatus.

Historical Review:
References of Arka kalpana are not found in Vedic period nor in Samhita period. First of all in 12th century Acharya Shodhala mentioned about the Arka Kalpana. In Modern period the text like Gadnigraha, Asav-Arista Vigyana and Sahastrayoga described about Ark yantra and Arka preparation.

Though different books are written on Ark Kalpana in Modern period, Arka prakash written by the Ravan is considered as a compressive referral book as far Arka Kalpana is concerned.

Importance of the Arka’s in Netraroga:
1. In comparison with the Ashchyotan procedure, ARK kalpana is always easy for patients use. As in Ashyotana, some of remedies, we have to prepare fresh (swaras, kalk etc.) On daily basis. But the Shelf life...
of Arka is 1 year, when it is stored in sterile container. So the least chances of contamination.

2. As ARKA is always in concentrated and purest form, while using it for Ashcyotana purpose, we can reduce the normal Aschyotan matra (8, 10, 12 drops) to (1, 2, 4 drops) as per the need.

3. It can be preserved for longer time than other Kalpanas.

4. Better choice for the patients of Mridu Prakriti and one who hesitates to take medicines like Churna, Kwath etc.

5. Arka is prepared by the combination of Jala and with help of Agni; hence Arkas are Laghupaki, Vyavayi & Vikasi & thus assimilates quickly in the body cells.

6. Arkas have good palatability and fragrance. (After instillation of eye drops, patient would not get bitter taste in mouth)

7. Effective method for the Aushadhi containing the volatile oils.

8. In the Ark prakash (3rd, 4th, 7th, & 9th Shatak or chapter), various remedies are written specially for Netra roga

Key points in the method of preparation of Arka:

2. Distillation consists of two steps:
   a) Evaporation
   b) Condensation
3. Precautions during preparation
5. Removing durgandha from Arka
6. Proper storage of Arka
7. Examine the characteristics of Arka
8. Shelf life: 1 year

Table No. 1: Shloka References of Netrarogas in Arkprakash

<table>
<thead>
<tr>
<th>Sr . No.</th>
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<th>Chapter with shloka no. (शतर्)</th>
<th>Mode of action</th>
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<td>3/23</td>
<td>Pittaj and Raktaj Netra roga</td>
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<tr>
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<tr>
<td>19</td>
<td>Netrya gana</td>
<td>9/5</td>
<td>Netra hitkar</td>
</tr>
</tbody>
</table>
Mode of action of above drugs:

According to treatment, we can divide the eye diseases in 2 categories

1. Local eye diseases e. g. Chalazion, Stye, Pterygium
2. Eye diseases due to systemic disorders e. g. Retinopathy due to hypertension. Anterior uveitis due to Arthritis.

So keeping in mind, above division, we can give ARK KALPANA accordingly.

In local eye diseases, we can prescribe the ARK KALPANA in eye drops form

In systemic eye diseases, we can prescribe ARK KALPANA, orally as a systemic medicine and locally as eye drops, if required.

DISCUSSION:

Probable action of drugs used in ARKPRAKASH

- Mishreya having the Ruksha, Ushna guna can be prescribed in Kaphaj netrabhishyanda (A.S. 19/1)
- Madhuparni is a well known and widely used as a Chakshushya dravya with its Sheetadi guna in Shushkashipak.
- Madanfal with its Snigdh guna was prescribed in Kukunak for Vaman (VA. U. 9)
- Daruharidra can be used as a Lekhan and Vranarpak in many eye diseases.
- Lodhra with its Sheet guna is effective in Raktaja Abhishyanda, Avrana shukla (VA. U. 11)
- Bruhatpatra (Erand) with the Snigdh, Ushna guna can be used as Shothahara in Utsangini (VA. U. 9, 10)
- Jivanti is Snigdha, Sheet and Chakshushya (Bha. Ni. ). Its ghruta is used in a tarpan for many ocular surface disorder.
- Shigru is Ushna, Ruksa, Laghu dravya, is effective in Pothaki vyadhi (VA. U. 9/33)
- Punarnava is widely used as a Shothahar (Bha. Ni. ) in various ocular diseases.
- Kakmachi is having Snigdha, Ushna guna, also used as a Shothhar (Bha. Ni. ) in various ocular diseases.
- Meshashrungi is Ruksa, Tikta dravya. Its reference is seen in Timir vyadhi (Su. U. 17/44, 45)

- Ketaki (Laghu, Ushna gunatmak) is Dashshamak and Chakshushya dravya. (Bha. pra.)
- Ahifen is a Sookshma, Vikasi dravya. As per the Arkprakash it can be use in Netrabhishyanda
- Mash is Guru, Ruksa dravya. Its flour is used as a base in Tarpana (kriya kalpa).

CONCLUSION:

Ark kalpana is a very unique formulation in Ocular therapeutics. With the strong base of Ayurvedic literature, there is a big scope of preparing herbal eye drops. While following this task, we have to consider many parameters like, pH of eye drops, its efficacy in eye etc. So it needs more pharmaceutical study and Research in Shalakyana (netraroga), without violating the basic principle of Arka Kalpana.

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