ABSTRACT-

Ayurveda is a very distinct medical science and has some unique features. Ayurveda mainly focus on the preventive aspects and helps in promotion and prolongation of a healthy and happy life. Ayurveda believes that success of any treatment is totally depends upon Chatushpada of Chikitsa. Chatushpada are Bhishag (physician), the Upastha (Medical Attendant), Rogi (patient) and Dravya (medicine). The medicine is one of the important part of treatment. So these medications should be given in proper quantity. If it is properly used in Samyak matra, it cures diseases. If it is used in Atimatra, it may harm. Same way if it is used in Hina matra, may not be capable to cure the disease. It is the Matra only by which Visha becomes Amruta and vice versa Ausadha becomes Visha.

The Matra depends on various factors like patient's age, sex, prakriti, strength, desha, agnibala, satva, dosha, severity of disease and medicines used. These factors are very useful for determination of medicinal dose according to rogi. These can be correlated with modern Pharmacology factors like age, weight, surface area, and enzymatic action etc. These factors can be compiled in the Balachatusstay namely Dehabala, Agnibala, Chittabala and Rogabala.

Keywords- Aushadhi matra, vyadhi, rogi, aushadha.

INTRODUCTION-

Matra means measurement of any kind, size, duration, number, degree, etc. This matra has significant importance from ancient period. In various samhitas like charak, sushrut, kashyap samhita, sharangdhar samhita matra has been explained.

Matra is the main core of treatment. Roga, Rogi and aushadha are the main components of treatment(1). The success of treatment depends on dosage, time and proper administration (Yukti). Every physician gives importance to these two factors Matra and Kala, where Matra is more important.

DEFINITION OF MATRA –

In charak samhita matrashitiya adhyyaya acharya charak described matra in relation to intake of food as the amount of food which, without disturbing the equilibrium of dosha and dhatu of the body and get digested as well as metabolised in proper time. Ahar matra depends on agnibala and it is to be regarded as proper quantity. (2)
Chakrapani in his commentary described *matra* of *ahar* and *aushadhi* should be taken in proper quantity. It produces good results. Also it doesn’t cause any undesired results when taken in proper quantity. (3)

Classification of *Matra*

Acharya Chakrapanidanta classified *Matra* into following types-

1. Ahar *matra*
2. Vyayam *matra*
3. Aushada *Matra*

Here the main importance and preference will be given on *Aushadhamatra* or *Bheshajamatra*, because *Aushada* is said second *Pada* of *Chatushpada* mentioned by Charaka.

*Aushadha Matra* is divided into-

- • *Matravat Aushadha* - When any *Aushada* or *Ahara* is taken in correct quantity is beneficial or suitable to person. It should act fast, easily metabolised and should not cause any harm to the body. (4)

- • *Amaravat Aushadha* - When any *Aushada* or *Ahara* is taken in improper quantity is not beneficial to person. (5)

Again *Amaravat Aushadha* is divided into

| भाज्यवत्त्वं पुनहिविविद्धमािक्षते हीनम् अचधिं 1) Hina matra 2) Ati Matra |
| i. *Hina Matra* | ii. *Atimatra* |
| Unable to treat disease | Cause the vitiation of *Tridoshas* leading to other undesired results. |
| Does not create any *Dhatu Samyata* | Excreted by *Malamargas* without being absorbed. |
| Usage of *Sodhana Ausadha* in *Hinamatra*, produce *Utklesa* of *Dosha* and *Ayoga Vyapada* i.e. unable to eliminate *Doshas* completely occurs. | Usage of *Sodhana Aushadha* in *Atimatra*, causes *Atiyoga* and may result into emergency and risk of life too. |

SPECIAL MATRAS

1) *Vardhamana Matra* -

It is a special dose design when drug to be administered in excessive dose and to make the biological platform ready to assimilate the greater dose of the same drug gradually, and to avoid its dependency or withdrawal symptoms. Further the gradual increase of dose may reach the deeper tissues in due course of time. Example: *Vardamana pipalli rasayan, Bhallatak kalpa* etc.

2) *Hrasiyasimatra*-

In *Shenapana Vagbhata* and *Sushruta* described *Hrasiyasimatra* to know the *Agnibala* of patients before fixing the dose, it is something like test dose. (6)

ह्रस्वमध्योत्तमा मात्रास्तास्ताभ्यश्च हिीिीम् दोषादीन् प्रागेव तु हिीिीम (A.H.Su.16/18)
DETERMINATION OF BHAISHAJ MATRA-

According to acharya sushrut, dose of medicine should be determine on the basis of the vyadhibala, agnibal and rogibala.\(^7\)

Acharya sharangdhar told kala, agni, bala, vaya, prakriti, dosha and desha are the factors on which aushadh matra can be determine.

In kaidev nighantu, acharya told that dose medicine is not fixed. It should be determine on diseased persons dosha, agni, bala, vaya, vyadhi, koshtha & aushadh dravya.

According to ashtang hridaya, dusya, desha, bala, kala, agni, prakriti, vaya, satva, satmya and aharavastha are helpful to decide aushadh.\(^8\)

Aushadh matra is determined by following three main factors -

1) As per Rogi
2) As per Vyadhi
3) As per Aushadh

- As per Rogi - there are many factors in diseased person from which we can determine aushdha matra. They are as follows

a) Acc. To Age-

In this factor first we see vaya vibhajan according to acharya charak, sushrut & vagbhat

<table>
<thead>
<tr>
<th>Balyavashtha</th>
<th>Charak</th>
<th>Sushrut</th>
<th>Vagbhat</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Aparipakva dhatu - 1-16 yrs</td>
<td>a) Ksheerap-upto 1 yr</td>
<td>a) Kumar - from birth to 16 yrs</td>
<td></td>
</tr>
<tr>
<td>b) Paripakva dhatu - 16-30 yrs</td>
<td>b) Ksheeranad from 2-4 yrs</td>
<td>b) Yauvan -from 16-34 yrs</td>
<td></td>
</tr>
<tr>
<td>c) Annad - from 4-16 yrs</td>
<td>c) Annad - from 4-16 yrs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Madhyamavastha</th>
<th>30-60 years</th>
<th>16-70 years</th>
<th>34-70 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Vrudhi -16-20 yrs</td>
<td>a) Vrudhi -16-20 yrs</td>
<td>a) Vrudhi -16-20 yrs</td>
<td></td>
</tr>
<tr>
<td>b) Yauvan -20-30 yrs</td>
<td>b) Yauvan -20-30 yrs</td>
<td>b) Yauvan -20-30 yrs</td>
<td></td>
</tr>
<tr>
<td>c) sampurnata- 30-40yrs</td>
<td>c) sampurnata- 30-40yrs</td>
<td>c) sampurnata- 30-40yrs</td>
<td></td>
</tr>
<tr>
<td>d) Hani -40-70yrs</td>
<td>d) Hani -40-70yrs</td>
<td>d) Hani -40-70yrs</td>
<td></td>
</tr>
<tr>
<td>Vrudhavastha</td>
<td>60-100 years</td>
<td>After 70 years</td>
<td>More than 70 years</td>
</tr>
</tbody>
</table>

According to acharya charak, shastrokta dravyapraman is useful for madhyam vaya, madhyakoshta and madhyabala person. Alpa matra is used for hina & adhik matra is used for adhika.\(^9\) In children dosha, dusya, mala & vyadhi are less than madhyam aya so aushadh matra also used in small quantity.\(^10\)

According to acharya sushrut, as the age is increased in the same manner aushadh matra is increased except vrudhavastha. For children acharya sushrut gave following measures .\(^11\)
Ksheerap -anguliparvadwaygrahan (one pinch of)

Ksheerannad - kolasthi praman

Annad - Kola praman

According to Acharya sharangdhar - churna & Kalka have following matra according to age

<table>
<thead>
<tr>
<th>Age</th>
<th>Matra</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st month</td>
<td>1 ratti (125 gm)</td>
</tr>
<tr>
<td>2nd month to 1 year</td>
<td>Acc. To month increase by 1-1 ratti</td>
</tr>
<tr>
<td>For 1 year</td>
<td>12 ratti</td>
</tr>
<tr>
<td>1 year to 16 years</td>
<td>Increase by 1 masha per year</td>
</tr>
<tr>
<td>16 years</td>
<td>16.5 gm</td>
</tr>
<tr>
<td>16-70 years</td>
<td>Sthir matra 16.5 gm</td>
</tr>
<tr>
<td>More than 70 years</td>
<td>As age increase by 1 year Decrease matra by 1 gm</td>
</tr>
</tbody>
</table>

According to Vishwamitra-

<table>
<thead>
<tr>
<th>Age</th>
<th>Matra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jatamatra (new born)</td>
<td>Vidangphala praman</td>
</tr>
<tr>
<td>Pratimasa</td>
<td>Increase by 1 vidangphala in each month</td>
</tr>
<tr>
<td>Ksheerap</td>
<td>Kolasthi praman</td>
</tr>
<tr>
<td>Ksheerannad</td>
<td>Kola praman</td>
</tr>
<tr>
<td>Annad</td>
<td>Udumbar praman</td>
</tr>
</tbody>
</table>

In kashyap samhita khilasthan acharya kashyap mentioned aushadh matra as follows

<table>
<thead>
<tr>
<th>Age</th>
<th>Matra</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10 days</td>
<td>Equal to badariphala beeja</td>
</tr>
<tr>
<td>10-20 days</td>
<td>Equal to half badri phala</td>
</tr>
<tr>
<td>1 month</td>
<td>Equal to badri phala</td>
</tr>
<tr>
<td>1-2 month</td>
<td>Equal to 1.5 badri phala</td>
</tr>
<tr>
<td>3 months</td>
<td>Equal to 2 badri phala</td>
</tr>
<tr>
<td>4 months</td>
<td>Equal to dry amalaki fruit</td>
</tr>
<tr>
<td>5-6 months</td>
<td>Equal to wet amalaki fruit</td>
</tr>
<tr>
<td>7-8 months</td>
<td>More than amalaki fruit</td>
</tr>
</tbody>
</table>

b) Acc. To sex -

As males are drudha indriya so aushadh should be given in vruдра matra. So that females are sukumar so aushadh should be given in rhasva mata. In pregnant women, after pregnancy and in menstrual periods drug should be given in small quantity. In pregnant women tikshan aushadh & tikta dravya should be given in small quantity.
c) Acc. To Prakriti -

In *vataj prakriti* people *vatavardhak* medicine should be given in *alpa matra*. So that in *pittaj prakriti*, *pittavardhak aushadhi* given in small quantity. *Kaphaj prakriti*, *kaphavardhak* medicines given in small quantity.

d) Acc. To Bala (Strengh) -

The dose of medicine is decided on the basis of patient's strengh. If excessive amount of medicine dose given to *durbala rogi* he may die. 

If *sanshaman* medicines gives in large quantity causes *glani, murchha, madakarak*. If it is given in small quantity it becomes *nishphal*. If *sanshodhan* medicines given in excessive amount causes *atiyoga*. If it given in small amount it is *nishphal*. 

We can give large amount of medicine to *balavan rugna* but *hina bala rugna* cannot tolerate so it should be given in small amount.

e) According to satva (psychology)-

*Pravar, madhyam satva* - *madhyam matra*

*Hina satva* - *hina matra*

f) According to Agnibala (power of Digestive juice) -

*drug quantity inferior to the patient's agnibala* - *nishphala*

*drug dose equal to the agnibala of the patient* - *gunakari*

*drug dose exceeding the agnibala of the patient* - *causes ajirna, visht hambh* 

In *Mandagni* patient - small quantity

*Samagni* patient - even quantity

*Tikshangni* patient- large quantity

g) According to Koshtha-

*Mrudu koshtha, rikta koshtha* - *alpa matra*

*Madhyam koshtha* - *madhyam matra*

*Kur koshtha, purna koshtha* - *vrudha matra*

h) According to Satmya -

*Satmya dravya* - *madhyam matra*

*Asatmya dravya* - *alpa matra*

*Oka satmya dravya* - *ati matra*
i) According to Desha (habitat) -

Patients from ushna desha - sheeta dravya in more amount

Patients from sheeta desha - ushna dravya in more amount

• **Aushadhi matra As per Vyadhi** - According to severity, duration, pathology and site of disease dosage of drug changes.

A) According to Vyadhi bala (severity of disease) -

तत्र व्याधिकलाकारम् किमृत्वा तदुपरि व्याधि व्याधिनिवयति । ( सु. सू. 39/10)

If disease is severe give best quantity of drug & if disease is mild give hina matra drug to the patient. If drug dose more than vyadhi bala given to patient causes upadrava to patient and if drug dose less than vyadhi bala given to patient it is nishphala. (15)

B) According to Vyadhi kala (Duration of Disease)-

New disease without any complications give small amount of drug to the patient. New diseases with complications give large amount of medicine. Chronic disease without complications give madhya matra of the drug. Chronic disease with complications give large amount of drug.

C) According to dosha dushya (pathology of disease) –Dosage of drug should be decided according to dosha & dushya (16)

*Bahudoshyukta vyadhi* -large amount of drug dose

*Alpadodhayukta vyadhi* -Small amount of drug dose

If Doshas are in large number, having different Constitution from dosha – large amount of drug dose

If Dushya are less & having same as dosha- Small amount of drug dose

D) According to site of disease-

Disease form in gambhir desha -shreshtha matra

Disease form in anya desha – alpa matra.

• As per aushadha –

  • According to guna -dosha of medicine
    
    *Tikdhna virya* medicine- 1 tola
    *
    *Madhyam virya* medicine -2 tola
    *
    *Mrudu virya* medicine -4 tola
    *
    Medicine which having large amount of dosha- alpa matra
    
    Medicine which having small amount of dosha- ati matra

  • According to habitat of drugs –

    Medicines grow in satmya desha of patient- madhyam matra

Medicines grow in anya desha-adhik matra
According to Formulations of drugs-

Acharya sharangdhar mention dose of different formulations –

- **Swaras -1/2 pala**
  - churna -1 karsha

- **Putapaka swaras -1 pala**
  - avaleha -1 pala

- **Kalka-1 karsha**
  - pramathya-2 pala

- **Kwath-1 karsha**
  - sneha - 1 pala

- **Hima-2 pala**
  - sandhan -1 pala

- **Phanta-2 pala**
  - vati -1 masha.

**Conclusion**

_Aushdha matra_ is main root of treatment. There is a saying about the dose that when poison is taken in minute quantity it acts like _Amrutham_ and vis a vis. As a small amount of water cannot extinguish fire, similarly medicine in small quantity cannot cure a disease and irrigation with over flood water is harmful for the crops. Similarly medicine in excessive quantity is harmful for the patients. Therefore, after carefully examining the strength of the disease and the medicine, the remedial measures should be administered in a quantity which is neither too large nor too small.

According to Acharya sharangdhar persons of present era (kalyug) are with low digestive power, lesser tolerance and short life span, so the suitable dose of the drug should be decided by the physician with his own intellect. As mentioned earlier, it depends on various factors like _Agni, Bala, Vaya,linga,Vyadhi, Dravya, Kostha, Prakriti, Satmya,Desha,kala, Bhesaja_ etc. So for the treatment of disease _audhadha matra_ is playing very important role.

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