

**Ayurlog: National Journal of Research in Ayurved Science***A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***To study the effect of mandur bhasma in garbini pandu (iron deficiency anemia in pregnancy)****KAVITA C. MULE<sup>\*[1]</sup> CHANDRASHEKHAR N. MULE<sup>[2]</sup>**

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**ABSTRACT**

Life is precious, and it is of the almost importance that we adopt all means at our disposal and take all the required precaution, to ensure a safe pregnancy and favorable outcome for both mother and fetus. In India, mortality is high in pregnancy. According to Ayurveda, *garbhini pandu* is included in *garbhopadrava*. Acharya Kshyapa describes the *samprapti* of *garbhinipandu* that provoked *pitta* and *vata* compressed *rasavaha nadi* and due to growing fetus *rasavaha nadi* obstructed with lids to *uttarotar dhatu* *shyathely* result in *panduta*. According to modern medicine, maternal physiology is changed. Increase in plasma and RBC produces hemodilution, result in anemia in pregnancy. So, in this

research study, *MANDUR BHASMA* is given to *Garbhini*.

Because, It is *pittashamak*, *Deepak*, *pachak*, *raktavridhikar*.

*BHASMA* standardization is also done and found that It is having  $Fe^{+}$  (5.386). Chemical compound is  $Fe_2O_3$ .

In this study, two groups of 30 patients randomly taken. Study group *mandurbhasma* is given.

In control group, balanced *raktavridhikar aahar* is advice.

\*Special Issue for "National Seminar- Practical approach in Prasutitantra And Streerog 2015"

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In study group 25(83.33%), having significant improvement in HB% i.e. 1gm %

3(10%) patient alpopshay, 2(6.66%) patient are no improvement. Two improve because my observation was this patient. Are low economic statuses with multi gravida.

From the above discussion of this study, not only dietary *raktavridhikar aahr* is sufficient but also supplementary iron treatment is also necessary for *garbhini pandu*.

### Aims

TO STUDY THE EFFECT OF MANDUR BHASMA IN GARBHINI PANDU (IRON DEFICIENCY ANAEMIA IN PREGNANCY)

**INTRODUCTION:** According to standard lead down by WHO in developing countries anemia in pregnancy is than when hemoglobin in peripheral blood is below 10gm /100ml. 160 women die in India every day during pregnancy. If treatment for anemia in pregnancy is not given this rate may increase. In modern medicine ferrous gluconate, ferrous sulphate is used to correct iron deficiency anemia in pregnancy. Drawback of ferrous gluconate and sulphate is intolerance, epigastric pain ,nausea, vomiting diarrhea ,constipation ,unpredictable absorption , so I select MANDUR BHASMA for this study, which is vrashya ,sheeta,aganideepak, pittashamak

and uttam raktavridhikar .During pregnancy maternal physiology altered due to fetus, which causes disease to mother named as garbhopadrava.

Garbhopadrava according to *Harita sumhita* <sup>4</sup>  
1.Swas 5. Jwara 2. Harllas 6.Aruchi,  
3.Chardi 7. Atisara 4.Shotha 8.  
Vivarnatva.

Vivarnatva is common symptom of Garbhini pandu that mines Garbhini pandu included in Garbhopadrav

All the rasavaha nadis are situated around the umbilicus, which are compresses by growing fetus. Due to this compression rasa does not flow freely in body resulting into panduta in gandakshi Pradesh and skin (K.S. Kh .9/46 -48)<sup>3</sup>. Pitta dhara kala is situated in between amashaya (stomach) and Pakvashaya (Large intestine)<sup>2</sup>. It is 'C' shaped Grahini and in this part digestion takes place. That minse around umbilicus is region of agani or pittoshma, That is GRAHANI (DEODENUM), so we can say that due to garbhavridhi duodenum compress and effect digestion in garbhini which result in garbhini pandu.(Sushruta samhita)

**Pramukh lakshana of garbhini pandu:**  
Aganimandy , Shramaswasa, shotha, Panduta, Bhrama Dorballya Hb % less than 10 gm%.

**REVIEW OF MODERN LITERATURE** Many organs undergo physiological changes during pregnancy.

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Tone and motility of stomach are decreases because of smooth muscle relaxing effect of progesterone.

Hematological changes -- Blood volume raise, plasma volume increases, heamodilution occurs, which leads to physiological anemia in pregnancy

**IRON DEFICIANCY ANEAMIA IN PREGANANCY**

CAUSES: - 1. Increased demand of iron 2. Diminished iron intake. 3. Disturbed metabolism.

4. Pre pregnant health status. 5. Abnormal or extra demand.

**DRUG REVIVES MANDUR** ( $\text{Fe}_2\text{O}_3$ ) which is formed on earth due to chemical reaction on Lohadhatu by air, sunrays, and water that is wheather.Granthokta MANDUR BHASMA<sup>10, 11</sup> is prepared. Standardization of mandur bhasma was done.

GUNA: Rasa- Kashay , Virya- Sheeta Vipaka- katu, Karma-Tridosha shymak, pittaghana, raktavridhikar, pandunashak,

Granthokta dose of mandur bhasma ,1 Ratti-2 Ratti =125mg -250 mg Twice daily (Ayurvedapharmacopeia of India)

**MATERIALS & MEHTODS:** Study done on 60 pt, selected randomly. Control group: 30 patients. Duration of treatment – 60 days

- Balanced raktavridhikar ahar, e.g. kharjur, mutton soup.
- Follow up every 15 days

Trial group: 30 patient, Duration of t/t : 60 days

Drug given: Mandur bhasma 250mg BD Follow up every 15 days

**Criteria of selection:** 2nd and 3rd trimester ANC.Age between 18-35yrs .

- HB% in between 6.5 gm.% to 10 gm %
- Patient taking treatment regularly. Regular follow-up

**Criteria of rejection**

- 1<sup>st</sup> trimester ANC
- Age below 18yrs & above 35yrs.
- Patient who are irregular
- Patient Suffering from any infectious diseases
- Bleeding tendencye.g. Bleeding piles, abruption placentae, bleeding gums.
- HB% -below 6.5gm% and above 10 gm. %
- Blood disorder e.g. megaloblastic anemia, sickle cell anemia.
- Major illness, tuberculosis, heart disease kidney diseases
- Toxemia in pregnancy 10 Patient of worms infestation.

**Ayurlog: National Journal of Research in Ayurved Science***A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***: Grading and scoring system of criteria of assessment (Table no: 01)**

| Clinical feature   | Sever 3(+++)                     | Moderate 2(++)                         | Mild 1(+)                  | Absent 0                         |
|--------------------|----------------------------------|----------------------------------------|----------------------------|----------------------------------|
| Agnimandhya:       | No filling to eat in a whole day | Tack soft diet forcefully (ones a day) | Take milled diet two times | Increases appetite spontaneously |
| Shramaswas :       | While below average activity     | While performing daily routine work    | while walking              | absent                           |
| Akshikuta          | Swelling all over the face.      | Selling on gandapradeshi & cheek       | Swelling Ganda-Pradesh     | Absent                           |
| Panduta (Vivarnya) | all over body                    | Nakhanetra panduta                     | Slite panduta at netra     | Absent                           |
| Brama              | while below average activity     | While performing daily routine         | Bhrama while walking       | Absent                           |
| Dorbally           | While below average activity     | While performing daily work.           | Dorbally while walking     | Absent                           |

EFFECT OF TREATMENT ON  
TRIAL GROUP 15 DAYS (Table no: 02)

TRIAL GROUP 60days (Table no: 03)

EFFECT OF TREATMENT ON

| Symptoms       | Upshaya | Anupasaya |
|----------------|---------|-----------|
| Akshikutashoth | 22      | 8         |
| Panduta        | 22      | 8         |

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| Symptoms       | Upshaya | Anupasaya |
|----------------|---------|-----------|
| Akshikutashoth | 2       | 28        |
| Panduta        | 2       | 28        |
| Swaskastata    | 1       | 29        |
| Agnimandya     | 1       | 29        |
| Shrama swasha  | 2       | 28        |
| Bhrama         | 3       | 27        |
| Dourbalya      | 3       | 27        |

|               |    |   |
|---------------|----|---|
| Swaskastata-a | 24 | 6 |
| Agnimandya    | 26 | 4 |
| Shrama swasha | 25 | 5 |
| Bhrama        | 25 | 5 |
| Dourbalya     | 25 | 5 |

Table shows the follow up wise effect of treatment on varies symptoms of Garbhini pandu in trial group was reduced day by day.

Control group 15dys  
control gr 60d

| Symptoms       | Upshaya | Anupasaya |
|----------------|---------|-----------|
| Akshikutashoth | 0       | 30        |
| Panduta        | 0       | 20        |
| Swaskastata    | 2       | 28        |
| Agnimandya     | 0       | 30        |
| Shrama swasha  | 2       | 28        |
| Bhrama         | 2       | 28        |
| Dourbalya      | 0       | 28        |

| Symptoms       | Upshaya | Anupasaya |
|----------------|---------|-----------|
| Akshikutashoth | 0       | 30        |
| Panduta        | 1       | 29        |
| Swaskastata    | 1       | 29        |
| Agnimandya     | 0       | 30        |
| Shramaswasha   | 1       | 29        |
| Bhrama         | 1       | 29        |
| Dourbalya      | 1       | 29        |

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Table shows the follow up wise effect of treatment on varies symptoms of Garbhini pandu in control group, symptoms was not reduced day by day but severity are noted

| Gr      | Testing difference of means between HB% in trial and control group on 60 days |   |   |     |   |   |     |     |     |     |   |   |   |   |   |     |     |
|---------|-------------------------------------------------------------------------------|---|---|-----|---|---|-----|-----|-----|-----|---|---|---|---|---|-----|-----|
| Trial   | 9.5                                                                           | 9 | 9 | 8.5 | 9 | 8 | 7   | 7   | 8.5 | 9   | 8 | 9 | 9 | 9 | 9 | 8.5 | 8.5 |
| control | 6.5                                                                           | 7 | 7 | 8   | 7 | 7 | 7.5 | 7.5 | 8   | 7.5 | 7 | 8 | 8 | 8 | 8 | 7.5 | 8.5 |

This observation represent comparisons of HB% IN in both groups . IN trial groups HB% Increases .

Calculated Student T value = 2.05 at significant value

| GROUPS        | NO. OF PT CURED | NO. OF PT Alpaupashaya | NO.OF PT NOT CUARD | TOTAL |
|---------------|-----------------|------------------------|--------------------|-------|
| Trial Group   | 25              | 3                      | 2                  | 30    |
| Control Group | 0               | 0                      | 30                 | 30    |

This table shows the effect of treatment on both group. in study group 25 (83.30%) patient get Upshaya .

3(10%) patient get s Alpopshaya only 2(6.33%) are not gets result it means 93% patient gets Upashayatmak result

Discussion-Garbhini Pandu curred by MANDUR BHASMA because, it is very chief, administered in small dose.

Fe<sup>+</sup> 5.386 (By Atomic Absorption Spectrophoto meter). Chemical composition

is Ferric oxide (Fe<sub>2</sub>O<sub>3</sub>)<sup>7</sup> of Mandur bhasma. In trial group all symptoms are markedly reduses and 25 patient are curred out of 30 patient ,3 patient get alpopshya ,while 2 patient are not cured .

In control group symptoms not cured and HB% - in study group -1gm % is increased. Testing difference of means between HB% in both groups. Table value of t =2.05 at significance level



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CONCLUSION: Only raktavridhikar ahar is not sufficient additional supplementary iron therapy is needed. Mandur bhasma is effective in Garbhini pandu, no adverse effect on fetus, and mother, so it should be continued after delivery also.

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