

Ayurvedic Drug Mandur Bhasma– A Review

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Abstract:

Ayurveda is a science that spans the globe. It is a well-known holistic medical method. *Ayurvedic Acharyas* describe various *Rasashastra* materials such as *Rasa*, *Maharasa*, *Uparasa*, *Dhatu*, *Ratanas*, *Sudhavarga*, *Ksharavarga* and so on. Traditional Indian medical formulations are known as *bhasmas*. These are standardized using quality control tests which are prescribed by *Ayurveda* and also by other guidelines. *Mandur* is a Metal. Iron oxide is a chemical compound with two iron atoms and three oxygen atoms. Today, iron insufficiency is a worldwide issue. Iron is a crucial component of haemoglobin; it accounts for nearly two-thirds of the body's iron, therefore anemia caused by a lack of red blood cells is known as iron deficiency anemia. *Mandur* is utilized in *Ayurvedic* medicine, particularly in the treatment of *Pandu* (Anemia). Various forms of *Mandur* formulations have been detailed in *Ayurvedic* texts. *Pandu* (Anemia), *Kamala* (Jaundice), *Shotha* (Inflammation), and other disorders benefit from *Mandur bhasma*.

Keywords: Anemia, *Ayurveda*, Iron, Iron oxide, *Mandur Bhasma*, Metal, *Pandu*

Introduction:

In *Ayurveda Bhasma* is described as metallic or mineral preparations. They are prepared by treating with plant juices and calcinations at a high temperature in an earthen pot ^[1,2]. This process is known as *Bhasmikaran*. Due to this process metals get converted into special chemical compounds which are used as drugs for various kinds of diseases. In *Ayurveda* control tests for *Bhasma* are *Nischandratva*, *Rekhapurnatvam*, *Varitaratavam*, and *Amla pariksha* ^[3,4]. Due to this *bhasmikaran* process physical and chemical properties of metals get changed. But these tests depend upon physical observation. So there may be personal bias and so errors can be recorded. Other tests like total ash, acid insoluble ash, loss on drying, etc. are also carried out.

Mandur Bhasma is used to cure several types of anemia as well as jaundice. *Mandur Bhasma's* hepatoprotective effect has been investigated in CCl₄-induced liver damage ^[5]. It has also been discovered to have lipolytic ^[6] and hematinic ^[7] properties. *Mandur bhasma*, like other *bhasma* products, is assessed using traditional quality control procedures and tests that are solely prescribed by guidelines.

Acharya describes the *Nidan*, *Purvarupa*, *Rupa*, *Samprapti*, and *Chikitsa* of *Pandurog* in *Charak Samhita*, *Chikitsa Sthana*, *Pandurog Chikitsa*. This chapter recommends the usage of various iron and *mandur* preparations. Pills are produced with equal amounts of *Gud*, *Sunthi*, *Til*, and *Mandur*, as well as double the amount of *Pippali*. *Pandu* is treated using these pills, which are taken orally. The goal

of the study was to see how certain indigenous medications affected people with iron deficient anemia.

Pandu is treated with *Loha bhasma* or *Mandur bhasma*, according to *Ayurvedic* scriptures. Various different medications are utilized with *Mandur* or *Loha*, taking into account *Samprapti* variables such as *Agnimandya* and *Dhaturukshata*, as well as *Raktakshaya*. Other medications commonly taken with *Mandur* or *Loha* include *Agnideepak*, *Yakritottejak Snigdha*, *Krimihar*, *Raktashodhak*, and *Raktavardhak*, some of which are iron-rich.

Review of Literature:

Ayurvedic Review:

Mandur Bhasma:

Mandur has been used in *ayurvedic* treatments since the *Samhita* period. *Mandur* and its medicinal properties were first referenced in the 15th century B.C. in the *Charaka Samhita*. *Mandur* is used to cure *Panduroga*, according to *Acharya Charaka* (Anemia). *Mandur* is described in *Panduroga* and *Kushtharoga adhyaya* by *Acharya Vagbhata* in *Ashtanga Hridayam*. When red hot iron is pounded, it leaves certain undesirable pieces that become the structure of *Mandur* over time. *Mandur* can be found on or beneath the surface of the earth. Small chunks of red hot iron are tossed and strewn on the ground when it is heated and hammered. These particles rust and become iron slag, which is then used to make *Mandur*.

When any iron material rusts owing to the actions of air and moisture on iron, *mandur* is produced. When iron is exposed to air, water, and sunlight, it generates *mandur*, a metallic oxide cum silicate of iron. *Mandur*, which is 80-100 years old, is wonderful and best for formulations, according to *Ayurveda*. Because of its vital medicinal characteristics, *Madura* is employed as the major ingredient in a variety of *ayurvedic* formulations. *Munda Mandur* is ten times more effective than other varieties of other *Mandur*. *Kanta Mandur* is a thousand times stronger than *Tikshna Mandur*, while *Tikshna Mandur* is a hundred times more powerful than *Munda*. *Kanta Mandur* is primarily used in medicine to treat a variety of ailments including senility. In the absence of *kanta Mandur*, gold or silver will suffice^[8].

1] Types of *Mandur*:

Table 1:

Sr. No.	Name of Mandur	Properties
1	<i>Mundalohakitta manduara</i>	<ol style="list-style-type: none"> 1. Its color is reddish 2. Heavy & oily 3. Also recognized as <i>mundakitta</i>
2	<i>Tikshnalohakitta Mandur</i>	<ol style="list-style-type: none"> 1. Its colour is Blackish 2. Heavy 3. Non porous
3	<i>Kantaloha Mandur</i>	<ol style="list-style-type: none"> 1. Its color is yellowish 2. Heaviest than others 3. Impervious 4. After cutting gives silver shining

2] *Grahya lakshana* (Charecteristics) of *Mandur* :

It should be soft, heavy, rigid, sycophantic, and black in colour, impervious, and more than hundred years old, obtained from historic sites.

3] Properties of various types of *Mandur*

Table 2:

Sr. No.	Name of Properties	Properties
1.	Therapeutic Properties	<ul style="list-style-type: none"> • <i>Rasa –kashaya, madhura</i> • <i>Virya -sheet</i> • <i>Vipaka -katu</i> • <i>Guna –ruksha, laghu, deepan</i> • <i>Doshaghnata - pittakaphaghna</i>
2.	Physical properties ^[9]	<ul style="list-style-type: none"> • Nature- Rough lumpy lumps • Color- Black • Strip - Black • Rift - Absent • Crack – like a shape of a scallop shell • Glaze - lusterless • Persistence – hard but fragile • Lucidity - dense • Resistance - 6 to 6.5 • Specific gravity- 3 to 3.8
3.	Chemical properties	<p>A) It should not contain <</p> <ul style="list-style-type: none"> • 30% iron (Fe) • 30% silica • 80% faylite (Fe₂Sio₄) <p>B) Heavy Metals & Arsenic- <i>Mandur</i> should not contain more than the stated limits for the following-</p> <ul style="list-style-type: none"> • As - 6 ppm • Cd - 8 ppm • Cu - 0.45% • Zn - 50 ppm • Ag – 7 ppm

4] Harmful Effects of *Ashuddha Mandur* (Impure):

Panduta (anaemia), *Kustha* (skin diseases), *Hridaroga* (cardiac disorders), *Shoola* (ache), *mutrashmari* (renal calculi), *Hrillas* (emetamesis), *Mrityu* (death), etc are some of the *ashuddha Mandur sevanjanya vyadhi* (Diseases).

5] *Shodhan of Mandur* (Purification Methods) –

a) *Samanya Shodhan*:

- b) Sesame oil, butter milk, cow urine, kanji, and horse gramme decoction were used to dip raw Mandur into five different liquid media.
- c) Vishesh Shodhan:^[10]
Views of Mandur Shodhana by different Acharyas –

Table 3-

Sr. No.	Procedures	Drug Media	Repetition	Reference
1	Pachana	Gomutra	-	Charaka Samhita
2	Nirvapa	Gomutra	7	Rasaratnasamucchaya Rasa Tarangini
			8	Chakraduttah Rasendra Sara Sangraha granth Ayurveda Prakasha granth
			21	Siddha Yoga sangraha
3	Nirvapa	Triphala Kwatha prepared by Gomutra	-	Rasa Ratna Samucchaya
4	Abhisheka Pachana	Gomutra triphala kwatha	7	Sharangdhar Samhita

6] Marana of Mandur^[10]:

After undergoing certain pharmacological treatments in *Rasashastra's* PUTA system of quantum heating, cleansed and detoxified materials are transformed into absorbable, adaptable, and solubilized form, known as *marana*.

Table 4:

Sr. No.	Procedures	Drug Media	Repetition	Reference
1	Putpaka	Triphala kwath	Thirty times	Rasatarangini
2	Putpaka	Loha marak gana	-	Loha marak gana
3	Putpaka	Gomutra/kumari swaras	7/21	Siddha yogasangraha

7] Indications of Mandur Bhasma-

- Shotha
- Kamala

- *Pandu*
- *Krimi*
- *Arsha*
- *Grahani*
- *Pliha shotha*

8] Therapeutic Dosages of *Mandur Bhasma* -

- Infant – Not suggested
- Children – 20 mg to 55 mg
- Adults – 120 mg to 350 mg

9] Doses as per *Rasatarangini*^[11]-

¼ ratti to 2 ratti (30mg to 240mg)

10] Formulations of *Mandur Bhasma* –

Mandur vatak-1, Mandur vatak-2, Mandur vatak-3, Vajra vataka Mandur, Triphaldi Mandur, Punarnavadi Mandur, Thrayushanadi mandur, Koladi Mandur, Agnimukha Mandur, Amritadi Mandur, Shothari Mandur, Shatavari Mandur, Shatavari Mandur 1, Shatavari Mandur brihat 2, Rasa Mandur, Tapyadi Mandur, Takra Mandur-1, Takra Mandur-1

11] *Anupan* –

Mostly given with *Shahad* (Honey)

Conclusion:

Mandur belongs to the *Loha or Dhatuvarga* group, which contains three varieties, one of which is *kantaloha*. *Mandur* has a higher medicinal value and is frequently utilized in *Ayurvedic* formulas. It's an *ayurvedic* iron supply that's also an iron oxide chemically. Smooth, weighty, 100 years old, rigid, unctuous, blackish in colour, and nonporous is the ideal *Mandur*. The principal source of iron in *Ayurveda* is *Ayaskriti* or *Loha Rasayana*, and *Mandur* is *Lohamala*.

It is used to treat iron deficiency anemia because it helps to raise hemoglobin levels. Hepatitis and associated liver and spleen issues are treated with *mandur bhasma*, a traditional remedy. *Mandur Bhasma* is also beneficial to *Shosha, Shotha, and Plihavidhi*, and "*Balanam Atishasyate*" signifies that, according to *Rasamrut Samhita*, *Mandur Bhasma* is particularly beneficial to children due to its tenderness and cool effectiveness. *Mandur* is one of the oldest metals known, with a lengthy history of medical use.

Source of Funding:

Nil

Conflict of Interest:

No Conflict of Interest

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