ABSTRACT

Ayurveda is the Ancient system of Medicine which gives equal importance to preventive and curative aspects of treatment. Rasayana Chikitsa plays a key role in the treatment of all the diseases (both in curative and preventive). There is nothing painful and stressful to women, for not being conceived. In the present modern era, female infertility is raised to the alarming extent due to diet & lifestyle modifications. Couples suffering from the infertility are approaching the infertility centres and going for the artificial reproductive techniques (IUI, IVF, ICSI-ET, Sarogasy). Ayurveda, through its unique line of treatment approaches, paves the way for fertility management through the medicines along with diet & lifestyle modifications. The Commonest cause for fertility being the Hypothyroidism in females (in this present study, I have considered hypothyroidism as Rasa pradosaja vyadi), clinical study was done at OPD, DR. BRKR Govt Ayurvedic College, Hyderabad and treated the patient with Dipana, Pachana, Rasayana Chikitsa and the patient conceived. In this present article an attempt is made to review and understand the concept of Rasayana chikitsa in the management of infertility with special reference to hypothyroidism (Dhatupradosja vyadi).

KEYWORDS: Female Fertility, Hypothyroidism, Rasa Pradosaja Vyadi, Rasayana Chikitsa.

INTRODUCTION

Ayurveda is the ancient, traditional system of medicine, which has got unique line of treatment for the female infertility. Infertility is defined as the inability of a sexually active, non contraceptive couple to achieve pregnancy in one year.[1] Or Infertility also is a condition with psychological, medical implications resulting in trauma, stress, particularly in a social set-up.[2]

Infertility is an alarming global health issue, not only affect the psychological condition of an individual but the whole family. Ayurveda treatment approach for the management of female infertility includes one or combination of Shamana Chikitsa, Shodana Chikitsa, Rasayana Chikitsa depending upon the cause involved.

In Ayurveda, various references on Vandhyata (infertility) are available. Vandhyata is included as one of the Yoni vyapat. Vandhya word is used as a symptom rather than a disease in our classics. Failure to achieve pregnancy has been referred under various conditions that is coitus with an young or old diseased woman, coitus in abnormal posture etc and the need of four important factor for Garbhapattti.[3] After observing the description about Vandhyata in Ayurveda, it can be concluded that the definition of infertility i.e. failure to conceive in modern science is a part of definition of Vandhyatva in Ayurveda. This means Ayurveda has much broader approach regarding this subject.

Incidence: Conception depends on the fertility potential of both male and female partner. The male is directly responsible in about 30-40 %, the female in about 40-50 % and both are responsible in about 10 % cases. The remaining 10%, is unexplained inspite of through investigations with modern technical knowhow.

Causes for Infertility in Brief are

1. Hormonal Imbalance
2. Hyperprolactinemia
3. Ovarian functional problem
4. Tubal factors
5. Uterine factors
6. Thyroid disease
7. Sexually transmitted disease
8. Structural obstruction
Hypothyroidism (A Cause for Vandhyata- Female Infertility)

Undiagnosed and untreated thyroid disease can be a cause for infertility i.e., Vandhyata. Both these conditions have important medical, economical, and psychology impact in our society. Thyroid dysfunction can affect fertility in various ways resulting in anovulatory cycles, luteal phase defect, high prolactin (PRL) levels, and sex hormone imbalances. Therefore, normal thyroid function is necessary for fertility.

The comprehensive thyroid evaluation should include T₃, T₄, thyroid stimulating hormone (TSH), and thyroid autoimmune testing such as thyroid peroxidase (TPO) antibodies, thyroglobulin/antithyroglobulin antibodies, and thyroid stimulating immunoglobulin (TSI).

Thyroid dysfunction is a common cause of infertility which can be easily corrected by the appropriate levels of thyroid hormones. It has been recommended that in the presence of raised TSH along with raised the treatment should be first to correct the hypothyroidism Hormone therapy with thyroxine is the choice of treatment in established hypothyroidism. It normalizes the menstrual cycle, PRL levels and improves the fertility rate.

If we try to have a keen insight to the pathogenesis of hypothyroidism according to the principles of Ayurveda, we find that it is basically caused due to dysfunctioning of the Agni. Jatharagni mandhata, which in turn, affects Dhatvagni, eventually, brings out pathogenesis & ultimately, the Vyadi is developed. According to Acharya Vagbhata, Looking in to its Doshika dominance, Kapha associated Pitta Dushti with vitiation of Vata due to Margavarana and predominantly Rasa-vaha, Medovaha and Mamsa-vaha Srotodushti can be considered as cause of the disease.[4]

There are multiple causes for the female infertility, 1. Ovulation problems may be caused by one or more of the following: A hormone imbalance, A tumor or cyst, Eating disorders such as Alcohol or drug use, Thyroid gland insufficienty, obesity, Stress, Intense exercise that causes a significant loss of body fat, menstrual irregularities.

2. Damage to the fallopian tubes or uterus can be caused by one or more of the following: Pelvic inflammatory disease, infection, Polyps in the uterus, Endometriosis or fibroids, Scar tissue or adhesions, Chronic medical illness, previous ectopic (tubal) pregnancy, birth defect, DES syndrome (The medication DES, given to women during pregnancy can cause female infertility). In this context, Ambu includes Rasadhatus, Rakta Dhatu and Ojus, which has its plays key role. Rasa pradosaja vyadi, hypothyroidism being one of the cause for the infertility, Rasapradosaja vyadi chikitsa i.e., Deepana, Pachana and Rasayana Chikitsa is adopted in the treating this particular case. Hence in the present clinical study of Vandhyatva (Infertility) 1. Trikatu churnam 3 gm two times daily before food, 2. Asoka arista 10 ml three

<table>
<thead>
<tr>
<th>Causes of Hypothyroidism: Modern Prospective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary hypothyroidism (95% of cases)</strong></td>
</tr>
<tr>
<td>Idiopathic hypothyroidism</td>
</tr>
<tr>
<td>Hashimoto’s thyroiditis</td>
</tr>
<tr>
<td>Irradiation of the thyroid subsequent to Graves’ disease</td>
</tr>
<tr>
<td>Surgical removal of the thyroid</td>
</tr>
<tr>
<td>Late-stage invasive fibrous Thyroiditis</td>
</tr>
<tr>
<td>Iodine deficiency</td>
</tr>
</tbody>
</table>

Rasayana Chikitsa

According to Sharangadhara, the word Rasayana is defined as, that which ameliorates Jara (Senility) and Vyadi (underlying disease).[5]

According to Acharya Charaka, while explain the Prajasthapana Dravya, describes four factors which are responsible for the conception and maintenance of healthy pregnancy. Four essential factors are rithu (timing), Kshetra (place/field), Ambu (Nutrition), Beeja(quality of sperm/ovum) [6]

Available online at: [http://ijapr.in](http://ijapr.in)
times daily and 3. Kanchanara Guggulu two vati three
times daily after the food, which are having Deepana,
Pachana, Rasayana Garbhashapak guna along with
Vatapittashamaka qualities to prove its efficacy
scientifically.

Aim of the Study
To evaluate the therapeutic efficacy of
Rasayana Chikitsa in the management of Infertility
(Vandhyata) secondary to patient suffering from
Hypo thyroidism.

Materials & Methods
A Female patient aged about 31 years, with 5
years of successful married life, a diagnosed case of
primary infertility, is selected from the OPD no 4, Dr
BRKR Govt Ayurveda College, Hyderabad for the
present study (OP.NO11694).

Criteria followed for the Selection
Patient’s history was taken according to
description given in Ayurvedic and modern science.
Vaginal examination was done by vaginal palpation
and inserting vaginal speculum.

Clinical Examination
Physical examination
- General condition- Average Build- average body
  built
- Height- 5’2”
- Weight- 70 kg
- Pulse rate- 68/min
- Respiratory rate- 17/min
- Blood pressure-130/70 mm of hg
- Lymphadenopathy- Not detected during
  examination.

Systemic examination
- CVS- S1 S2 normal, no any abnormal sound
  present.
- Respiratory System -trachea centrally placed,
b/l equal air entry, no any added sound present.
- GIS- Soft, non-tender, no any organomegaly
  present
- Uro- genital System - NAD
- Menstrual history- Heavy menses, MC occur at
  20-25 days of interval and lasting for 3 days.
  - CNS- Higher function and orientation normal
    for time, place and person

Table Showing: Results of Treatment (Subjective & Objective Parameters) Every 3months

<table>
<thead>
<tr>
<th>Parameters</th>
<th>At the beginning of the treatment</th>
<th>After 3 months of treatment</th>
<th>After 6 months of treatment</th>
<th>After 9 months of treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>78kg</td>
<td>76kg</td>
<td>72 kg</td>
<td>70 kg</td>
</tr>
<tr>
<td>Menstrual irregularity</td>
<td>Present (often used hormones for correcting menstrual)</td>
<td>Partially corrected (dependency on hormones reduced)</td>
<td>Corrected (no hormones are used)</td>
<td>Pregnancy confirmed.</td>
</tr>
</tbody>
</table>

Personal history
- Diet: mixed dietary habit
- Appetite: poor
- Bowel habit: constipated with hard stool.
- Micturition habit: normal in quantity and frequency.
- Sleep: regular and sound in nature
- Marital status: Married
- Addiction: no addiction

Family history: No any detectable family history
present.

Past history of treatment/disease: No any past
history related to treatment and disease, which
provoke chances of hypothyroidism.

Laboratory Investigations
Laboratory profile at beginning of the treatment

Blood examination
TLC- 8600/cmm DLC-N-64%, L-23%, E-7%, M-2%, B-
0% Hb- 11 gm/dl
Thyroid profile: T3-0.79 ug /dl T4-7.92 ug/dl TSH-
6.2 ug/dl
Ultra Sound Abdomen: PCOD

Chikitsa /Line of Treatment
Rasa pradosaja chikitsa i.e., Deepana,
Pachana, Rasayana i.e., with 1. Trikatu churnam 3 gm
two times daily before food, 2.Asoka arista 10 ml
three times daily and 3. Kanchanara guggulu two Vati
two times daily after the food. The same treatment
is followed for 9 months with monthly follow up.

Observations & Results
It is observed that there is gradual improvement in
clinical symptoms in respective follow ups. After nine
month of therapy following observation were made
in parameters (subjective &objective) pertaining to
hypothyroidism.
1. Improvement in Menstrual Irregularities-100%.
2. Body weight is reduced from 78 kg to 70 kg.
3. Improvement in appetite is100%.
4. Improvement in constipation is75%.

Beside improvement in clinical symptoms,
remarkable changes are observed in thyroid profile
at the end of third follow up.
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Before Treatment</th>
<th>After Treatment</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appetite</td>
<td>Less</td>
<td>Improved</td>
<td>Improved</td>
</tr>
<tr>
<td>Constipation</td>
<td>Constipated</td>
<td>Improved</td>
<td>Improved</td>
</tr>
<tr>
<td>TSH Levels</td>
<td>6.2 with usage of 50 mcg of thyroxin</td>
<td>5.6 with usage of 50 mcg of thyroxin</td>
<td>Improved</td>
</tr>
<tr>
<td>Pregnancy confirmation</td>
<td>Negative</td>
<td>Negative</td>
<td>Positive</td>
</tr>
</tbody>
</table>

At the end of the 3 months, menstrual irregularity is partially (dependency on the hormones reduced) corrected, weight was reduced 2 kg and level of TSH is 5.6. Same treatment is followed for another 3 months along with thyroxin hormone is reduced to the dose of 25 mcg once daily.

At the end of the 6 months, menstrual irregularity is corrected, weight was reduced 4 kg and level of TSH is 4.8. Same treatment is followed for another 3 months along with thyroxin hormone is reduced to the dose of 12.5 mcg once daily.

At the end of the 9 months, menstrual irregularity is corrected, weight was reduced 2 kg and level of TSH is 5.2 and the patient is conceived spontaneously.

Subjective and Objective parameters are obtained before and after treatment were recorded and analyzed.

**DISCUSSION**

*Shareera* is composed of *Dosha, Dhatu* and *Mala*, among which *Dhatus* are more important structurally as they hold the body and perform specific functions. Any type of disease / *Vikara* is generated when vitiated Dosa reside in *Dhatu / mala* or in both. When vitiated *Doshas* are attached to a particular *Dhatu* and produce any kind of malformation in the production or alter the functions of the related *Dhatu*, which is termed as *Dhatupradosa* or *Vyadhi*.

Hypothyroidism (here, I am considering as *Dhatu pradosaja vyadhi*) where there is hyposecretion of thyroid hormones. As discussed earlier, infertility not only affects the physical health but also it has impact on psychological and social well being of the couple, present study throws light on female infertility with a new prospective.

*Rasyana chikitsa* plays a key role in the treatment of all the diseases (both in curative and preventive). *Deepana, Pachana, Rrasayana chikitsa* is given to the patient for the patient with a review of every 3 months and Subjective and Objective parameters are obtained before and after treatment were recorded and analyzed.

Healthy lifestyle modifications also help to promote fertility in present scenario. Few of them are:

1. Maintain a healthy weight. Being overweight or significantly underweight can cause hormonal imbalance
2. Prevent sexually transmitted infections, leading cause of infertility for women.
3. Avoiding the night shifts. Women working in the night shift might risk of infertility, possibly by affecting hormone irregularities.
4. Practice Stress relieving techniques, eg yoga, meditation, going out for a holiday etc.

**CONCLUSION**

This humble trial is conducted in single case study with limited parameters. There is a need for further research in large sample with more parameters for analyzing its efficacy of *Rasyana chikitsa* in the management of female infertility secondary to hypothyroidism, which will be benefitable to the humanity at large. The given drugs are safe, cost-effective, having no adverse reaction and side effects during the full course of treatment.

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*Address for correspondence
Dr. Gandham Neelima
PG Scholar,
Department of Dravyaguna,
Dr.BKFR Govt Ayurvedic College,
Hyderabad, India.
Email: dr.neelimathota@gmail.com

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