Role of Shivlingi in Infertility

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Abstract
From time immemorial the phenomenon of infertility was prevalent throughout the world which may persist as long as the human race exists. Every human being has an inherent, intense desire to continue one’s own race; to become a mother is one of the most cherished desires of every woman. Herbal drugs are cheaper, easily available and with no fear of any side effects. Many herbs effective for infertility are also used in folk practice which often goes unnoticed. Shivalingi beej is an unnoticed folk medicine that shows good results for counteracting infertility. An effort has been made in this paper to explain hypothetically the role of Shivalingi beej in infertility of either sex.

Keywords: Infertility; Traditional system of medicine; Spermatogenesis; Ovulation; Conception

Introduction

Aim
The present work aims at evaluating the anti-infertility action of ethno medicine Shivlingi.

Objective
To interpret the hypothetical action of Shivlingi for infertility within both sexes.

India is one the richest nations in terms of natural resources; together with having a known history of a prestigious traditional system of medicine.

Infertility a major issue
The phenomenon of infertility is prevalent throughout the world and may persist for time to come.

Every human being has an inherent desire to continue one’s own race. Every woman cherishes the desire of becoming a mother.

What is infertility: Failure to achieve conception by a couple of mature age, having normal coitus during the appropriate period of menstrual cycle regularly at least for one year of their conjugal, is defined as infertility.

Impact of infertility: Being infertile causes a major impact on the health of the body, especially the mental state.

To overcome this situation: Couples encountering this problem require:
   a. Medical treatment for infertility
   b. Counseling for distress and mental trauma.

Treatment for infertility: Various pathways do help in treating infertility, e.g. modern Allopathy, alternative therapies including Ayurveda, Unani, Homeopathy, and Naturopathy.

Material and Methods
Shivlingi
Botanical name: Bryonialaciniosa Linn
Rasa: Katu, Veerya: Ushna

Karma: Rasayana, Sidhma: Kushthahara [1]
Chemical constituents: Alkaloids, Flavonoids, Triterpinoids, Saponins, Steroids, Proteins.

Research done on action of Bryonia alaciniosa in infertility
1) A clinical case study was done in blocked fallopian tubes and its management with Ayurvedic medicine. One of the medicines given was Shivlingi beej. In this study the medicine showed good results.

2) Action of ethanolic extract of seeds of Bryonia laciniosa Linn on male Albino rats showed androgenic activity and effects on hypothalamo-pituitary gonadal axis.

Action was evaluated as follows
1) Increase body weight, testis, prostate, epididymis and seminal vesicle.
2) Increase in spermatogenesis.
3) Increase in sperm count.
4) Increase in fructose content of seminal vesicle.
5) Increase in serum testosterone and LH.

Other Pharmacological activity related research work on Bryonia laciniosa Linn (Shivalingi) [2,3].

DHEA as an important factor in fertility

Female infertility:
1) Dehydroepiandrosterone (DHEA) supplementation improves pregnancy chances in women with diminished ovarian reserve (DOR), by possibly reducing aneuploidy [4].
Male infertility

1) DHEA is an adrenal steroid that serves as an indirect building block for other hormones and exerts very weak androgenic (testosterone-producing) and estrogenic (estrogen-producing) activity depending on the body’s need and hormone balance.

2) DHEA levels start relatively low at birth, and gradually increase until puberty, and then levels start declining as age increases.

3) DHEA supplementation can restore levels that decline in the body with age, and provide other health benefits in older individuals or those having endocrine deficiencies.

Results

Probable hypothetical anti-infertility action of Shivlingi through DHEA in both sexes:

Male infertility

As mentioned above Shivlingi has androgenic effects and it acts on the hypothalmo-pituitary gonadal axis.

In male infertility Oligozoospermia, Azoospermia, Oligoasthenozoospermia, Asthenozoospermia are the main pathological conditions.

In an Ayurvedic perspective the action on pathological conditions of Shukradhatu can be illustrated as follows.

1) Phenila- In this condition the motility is affected.

2) Tanu- In this condition the semen is transparent. Because of this there is decreased nutrient value of semen plasma which is necessary for forward progressive movement.

3) Ruksha- In this condition sperm do not move freely by lack of plasma mucous and low nutritive value.

4) Alpa- In this condition low volume of semen and sperm with decreased motility is seen. This is because semen loses its buffering capacity in cervical media.

5) Kshaya- In this condition a painful ejaculation with presence of WBC, RBC in semen can cause non-immunological agglutination and impaired motility and count.

6) Ksheen- In this condition less sperm, motility and strength is seen.

For the above mentioned pathologies of Shukradhatu, the effects of Shivlingi may be described as follows

By the androgenic effect on Leydigs cells and Sertoli cells, action of Shivlingi was evaluated as follows:

1) Increase weight of body, testis, prostate, epididymis and seminal vesicle.

2) Increase in spermatogenesis.

3) Increase in sperm count.

4) Increase in fructose content of seminal vesicle.

5) Increase in serum Testosterone and LH.

We can deduce that the androgenic action of Shivlingi maybe exerted through DHEA.

As described in Dravyaguna classics Shivlingi has a Rasayana karma by which the purest Shukradhatu is synthesized, thus helping with fertilization.

In cases of Oligozoospermia, Asthenozoospermia and Oligoasthenozoospermia, Shivlingi by its Rasayan karma treats these conditions by androgenic effects through DHEA. In the case of Azoospermia, there is absence of sperm due to obstruction or failure of spermatogenesis.

Obstruction may be relieved by treatment of Katu Rasa, Ushna Veerya and Rasayana that has decreased quality causing spermatogenesis.

Female infertility

Diminished ovarian reserve (DOR) is a condition that causes infertility, mostly in older women.

Aartava-kshaya, which can be correlated with DOR, has been described as deficiency or loss of Artava dosha not appearing in time, is delayed, or is scanty.

DOR can occur in any condition according to Ayurvedic types of Vandhyatva (inherent infertility).

Shivlingi is known for its androgenic activity. It also helps in patients having ovulation problems that are typical conditions like DOR.

Rasayan action of Shivlingi helps to synthesize purest Rasa dhatu subsequently, Upadhatu Artava is formed having required quality for fertilization.

Hypothetically the Rasayan karma in this regard may act through androgenic effect via DHEA.

Discussion and Conclusion

Various indigenous drugs have been continually used to treat infertility. Many of them have specific actions on either sex. Some drugs having only specific actions on either male or female infertility.

Shivlingi is one drug of choice preferred for infertility treatment in both the sexes. The plant seeds are used by traditional healers since thousands of years. The data available regarding Shivlingi guna karma in the texts is limited. There are innumerable claims of its varied uses, alleviating wide range of infertility affections. This calls for scientific validation for its attributes and principles. Infertility experts, research scholars and scientists have a wide scope to achieve in-depth knowledge of Shivlingi.

This effort of the hypothetical evaluation of anti-infertility action of Shivlingi may form a base for further research and revalidation.

References


