

Depression – A cause for Male Infertility

**Dr. Jibi Varghese T.^{1,2}, Dr. Vaishali Deshpande³, Dr. Manna Mathew⁴,
Dr. Shreelakshmi S.⁵**

¹ Ph.D Scholar, Parul Institute of Ayurveda, Parul University, Vadodara –Gujrat.

² Prof. Department of Kayachikitsa DR. D.Y. Patil College of Ayurveda, DR. D.Y. Patil Vidyapeeth, Pimpri –Pune

³ Professor, Department of Kayachikitsa, Parul Institute of Ayurveda, Vadodara – Gujrat

^{4,5} P.G. Scholar, D.Y. Patil College of Ayurveda, DR. D.Y. Patil Vidyapeeth, Pimpri –Pune

Corresponding Author: Dr. Shreelakshmi S.

Email Id - drsreelakshmisobhanadhan93@gmail.com

Abstract:

Infertility or a couple being unable to conceive a child can cause significant mental unhappiness. State of mind has been identified as having a influence on health. Men's reproductive health may also be affected by their social environment. Emotional stress and depression can interfere with certain hormones needed to produce healthy sperms. In addition it may cause sexual dysfunction due to reduced libido, erectile dysfunction, delayed or inhibited ejaculation. Severe and prolonged emotional stress and depression can affect the sperm count and its quality. Ayurveda and yoga together can well manage this condition.

Keywords – Depression, male infertility, sperm count, Ayurveda, Yoga.

Introduction

Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self worth, disturbed sleep or appetite, low energy and poor concentration. The effects of depression and infertility on men is seldom addressed. Those couples who are planning to start a family and know that they have some fertility issues it becomes a matter of serious concern and anxiety and depression. Men are generally perceived as strong characters with the ability to overcome adverse situations and emotions. Infertility is considered as a stigma in the society and men who suffer from both depression and infertility often find themselves isolated during this difficult time. It not only hampers the primary relationship with the spouse but also with family members and friends. It further in cases may lead to avoidance in social interactions with families who have children and end up with marital conflicts.

Purpose of the paper –

1. To correlate emotional disorders and its impact on semen quality
2. Men's Depression could lower chances of pregnancy for couples
3. Ayurvedic management to deal with depression induced male infertility

Causes of Depression

1. Genetic or hereditary
2. Biological/ biochemical/medication
3. Environmental
4. Socio cultural factors/ relationships/personality

Signs and Symptoms of Depression

1. Persistent sadness , anxious , empty feelings
2. Feeling of hopelessness
3. Feelings of guilt, worthlessness or helplessness
4. Irritability, restlessness
5. Loss of interest in activities or hobbies including sex
6. Fatigue and decreased energy
7. Overeating or appetite loss
8. Insomnia, excessive sleeping
9. Thoughts of suicide, suicide attempts

Conventional Management of depression includes (1) –

1. Counseling and psychotherapy
2. Anti-depressant
3. Electroconvulsive therapy

1. **Counseling & Psychotherapy** – it is generally a talk therapy wherein the counselor helps to understand the problems and provides strategies to cope with them. It generally focuses more on personal feelings and behavioral patterns.
2. **Anti-Depressant therapy** – these are measures that can relieve symptoms of depression , mood and anxiety disorders with the help of medicaments. Selective Serotonin Reuptake Inhibitors (SSRIs) are often the first choice of antidepressants , because they have fewer side effects in comparison to other drugs.
There is clinical evidence showing that SSRIs use is significantly associated with sperm DNA damage . In addition men treated with SSRIs have been found to have lower sperm count, lower sperm motility and a more irregular structure of sperm. Other antidepressant drugs also have a great impact on male infertility including affects on arousal, erections and orgasms. These sexual problems could further cause impact and cause depression.
3. **Electroconvulsive therapy** – It is a medical treatment most commonly used in patients with severe depression and bipolar disorder that has not responded to other treatments. Electroconvulsive therapy involves a brief electrical stimulation of the brain while the patient is under anesthesia.

Ayurveda Management in Depression induced Infertility

According to ayurveda, Susrutha acharya has described *swasthya* as a state when a person enjoy a balance of physical and psychological elements(*samadosh*),of energy which gets produced in our *sharira(samagni)*,of elementary tissues in the organs(*sama dhatu*) and proper timely expulsion of waste products(*mala kriya*)along with a pleasant soul, and proper functioning of the five sense organs and mind .From this definition of health, it means that along with a healthy body, one should possess a healthy mind also. Along with *Sharirdoshas* ,*manasdoshas* like *rajas* and *tamas* are responsible for *manasvyadhi*. The main factor for all *Mansikvikaras* are *Alpasatva.*, Depression can be co related with *Manoavsada / Manodainy/vishada*. According to Charaka, *vishado rogavardhananam srestha*; which means *vishada* can be the cause of diseases. In ayurveda, it has been described that a healthy progeny can be formed only if healthy *shukra* and *arthava* combine in a healthy mental and physical environment. So we can say that ,the sperm/egg formation and quality will be affected if male/female has depression. When we

consider male infertility in aspects with Ayurveda certain factors are responsible eg. *Shukradosha*, *aaharajadosha*, *viharajadosha*, *alpashareera* and *manasabala*. *Vajikarana chikitsa* is a branch which deals with sexual well-being. Thus the treatment for Depression induced infertility can be taken on the same lines of principle as explained by Acharya Charaka (2).

1. *Daivavyapashrayachikitsa*
2. *Yuktivyapashrayachikitsa*
3. *Satvavjayachikitsa*

DaivavyapashrayaChikitsa – present modernization has outmoded *daivichikitsa*, but Ayurveda and the *gyotishshastra* are still relevant and proves effective. *Putrakameshtiyajna*, *varanabandha*, such knowledge which was been practiced have been lost. The practices of visiting temples for worship, following certain rituals, chanting mantras and *manidharana* still persists.

YuktivyapashrayaChikitsa –

Yuktivyapashraya chikitsa deals with a skillfully planned and administering the treatment as per the constitution of the person and proper analyzing of the *doshaavastha* of the patient. Panchakarma procedure like *Vamana*, *Virechana*, *Vasti* and *Nasya* can be adopted in cases where *bahudoshavastha* is prevalent. Such procedures does the *shodhana* of the vitiated *doshas* and can prove effective in cases of Infertility and Depression. For *shodhana chikitsa*, as a *purva karma*, first the patient's *agni* has to be corrected with *deepana-pachana*. once he attains *niraam lakshan*, *snehapana* can be done till attainment of *samyak snigdha lakshana*. then *shodhana* procedure (*vaman/virechan*) can be done as per the season and disease condition of the patient. Once the purificatory therapies are done, the patient can be subjected with shaman medications say for example *mashadi choorna* as its *vrshya*. As part of *Shamanachikitsa panchakarma upakarmas* like *Talapothichil/ Shirolepam*, *Shirodhara*, *Shirobasti*, *Talam* etc. also can be prescribed.

Medhyarasayana as per Acharya Charaka like *Mandukaparni*, *Yasthimadhu*, *Guduchi*, *Shankapushi* can be used. Herbs like *Ashwagandha*, *Jatamamsi*, *Tagar*, *Brahmi* are also very effective in treating *manasvikaras*. While herbs like *Gokshura*, *Bala*, *Shatavari*, *Ashwagandha*, *Vidarikanda*, *Kapikachu* etc. are effective in the management of Infertility. *Rasayana* like *Chyavanaprasha*, *Narsimharasayana* are also effective in treating male infertility.

Satvavajay chikitsa – It refers to controlling and winning the patients mind and helping them to keep control over their unwanted emotions and disease causing factors. It is considered as a psychospiritual approach in dealing the patients with nonpharmacological modalities. Its main aim is to modify the *rajas* and *tamas manobhavas* which is considered as a illness causing mental humors and improving the *satva* of the patient. It is a therapeutic intervention to start with counseling session. in this session, the person's psychosocial and emotional necessity was considered by understanding his condition of childlessness. its not merely counseling, it incorporates modification in lifestyle like daily routine of exercise, yoga, pranayama along with a healthy balanced diet.

Yoga

Yoga is one of the best way to lighten the mood and keep depression at bay. Yoga poses increase blood circulation to the brain and enable the production of mood elevating hormones. Yoga asana like *sethubandasana*, *Urdhvamukhsvanasana*, *adhomukhsvan asana*, *halasana*, *uttanasana*, *Savasana* help in curing the condition of depression. While *Siddhasana*, *Vajrasana*,

gomukhasana, mayurasana helps in cases to improve the abdominal muscles, supports the pelvic diaphragm and improves power and virility.

Conclusion - Evidence has shown that if a man experiences long term stress, thinking negative thoughts about various possible social –economical factors , his levels of hormone testosterone are lower. These decreased levels of testosterone can have a direct effect on the quality of sperm that is produced, as well as sperm production itself. Furthermore, depressions effects on testosterone levels can result in disturbances of the functioning of the testicles and have a great impact on sperm concentration and semen quality in general. Thus Emotional stress and depression can interfere with certain hormones needed to produce healthy sperms. It suggests that stress and depression can reduce sperm and semen quality, which could have implications for male fertility. Depression can be well managed by opting the principles of Ayurveda may it be starting from the *dinacharya ,sadvruttapalan, achar rasayana* and the different medicaments and panchakarma procedures. And of course Yoga and meditation is just like icing on the cake.

References –

1. [https://thebookof man.com/mind/fatherhood/male-infertility-and-depression](https://thebookofman.com/mind/fatherhood/male-infertility-and-depression). The book of Man by Vinod Nargund
2. Charaka Samhita of Agnivesha by Pandit kashinath Sastri and Dr Gorakhnath Chaturvedi, Chaukhambha Bharti Academy, edition 2001, pg. no. 238.