Lifestyle Modification and Diet in Female Infertility

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Abstract

According to WHO, about 15% of couples of childbearing age seek medical help for infertility, usually after 2 years of failing to conceive? After medical examinations, the causes of infertility remain unexplained in only 5-10% of couples. According to Ayurveda the management should be addressed mainly the underlying causative factors. Once the cause is corrected there will be ever likely chances of women regains fertility state. Infertility is a common condition effecting 10f 6 couples during their reproductive life time. Among these couples, problems with ovulation can be identified in 18 to 30% of cases. Treatment option for infertility are available, their large cost and frequency of adverse events have motivated the risk factors. Exercised performed in different amounts and frequencies has varying effect on female infertility. There is a strong evidence that age, weight, physical activity, dietary factors, such as intake of fatty acids, protein, carbohydrate, dairy food, are related to infertility and smoking impact on general health and on reproductive performance. Factors such as caffeine, alcohol consumption and exposure to environmental pollutants cause infertility. It is concluded that lifestyle modification can assist couples to conceive spontaneously.

Keywords: Infertility; Diet; Lifestyle.

Introduction

India currently faces approximately "33 births a minute; 2000 an hour, 48000 a day, which calculates to nearly 12 million a year". Now days the total fertility rate has declined especially in the last decade.

According to WHO, about 15% of couples of childbearing age seek medical help for infertility, usually after about 2 years of failing to conceive? After medical examinations, the cause of infertility remains unexplained in only 5-10% of couples. It is known fact that humans are one of the least fertile creatures on earth. There is only a fairly short time within the menstrual cycle, when conception is possible. It is only 25% each month and estimated that 10% of

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normally fertile couples fail to conceive with in their 1st year of attempt and 5% after 2 years.

Between 2 and 10% of couples worldwide are unable to conceive a child and further 10-25% experience secondary infertility. As per WHO census, there are around 60-80 million fertile couples in the world and becoming pregnant is not so easy, even for people who do not have fertility problems.

According to Ayurveda, the management should be addressed by the underlying causative factors. Once the cause is corrected there will be ever likely chances of women regains fertility state. Infertility is a common condition effecting 10f 6 couples during their reproductive life time. Among these couples, problems with ovulation can be identified in 18 to 30% of cases. Treatment option for infertility are available, their large cost and frequency of adverse events have motivated the risk factors.

Causes of Infertility

Conception depends on the fertility potential of both male and female partners. 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. It is also strange that 4 out of 10 patients of unexplained category become pregnant within 3 years without having any specific treatment.

According to Ayurveda it occurs when a person's reproductive tissue / shukradhatu remains bereft of nutrition. This can be due to poor digestion and because of certain toxins in body. According to Ayurveda causes of infertility is Anxiety, depression, insomnia, spicy and salty food, weightand smoking.

Poor diet and unhealthy lifestyle might be one of the reasons for ovulatory disorder infertility. Healthy weight and increased physical activity was found to lower the risk of female infertility. About 69% of cases of infertility, due to the ovulatory disorder are preventable by making simple changes in lifestyle and nutrition.

Life Style Modification and Diet

Lifestyle including age when starting a family, nutrition, weight management, exercise, psychological stress, cigarette smoking, recreation drug use, alcohol use, caffeine consumption, environmental exposure.

Age

A woman is born with all oocytes, as the number of oocytes decline, a woman's menstrual cycle shortens, infertility increases. Increasing age increases a woman's chances of conceiving may be as high as 71%, when over 36, it may only be 41%.

Weight

Obesity is not only the way in which weight can impact fertility. For woman, being underweight and having extremely low amounts of body fat are associated with infertility.

Stress

It is a prominent part of any society, whether it is physical, social or psychological. Infertility itself is stressful, due to societal pressures, testing diagnosis treatment, failures, unfulfilled desires, and even costs associated with it.

Physical Stress: women who has a job and worked more than 32 hrs a week experience a longer time to conception compared to women who works 16 to 32hrs a week.

Psychological Stress: Anxiety disorder ordepression,

affects 30% of women possibly due in part to infertility.

Smoking Cigarette

Cigarette smoke contains over 4000 chemicals and is associated with number of health complications. The reduction in fertility among female smokers cause decrease in ovarian function and disruption of hormone levels.

Alcohol

Women who drink large amounts of alcohol have a higher chance of experiencing fertility. It causes decrease in probability of conception rate by 50% and decreasing implantation rate, increasing risk of abortion, and causing anovulation.

Environmental and occupational exposures

Many potential threats to reproductive health are encountered in everyday life through biological (viruses), physical (radiation) and toxic (chemicals) sources.

Air pollution: It is the release of pollutants such as sulphur dioxide, carbon monoxide, nitrogen oxide, from motor and vehicle exhaust, industrial emissions, coal and wood burns.

Diet

Eat healthy fats and using more vegetables (unsaturated) oils is good not only for fertility but for avoiding heart diseases, damage to blood vessels and improving insulin sensitivity. Nuts, vegetable oils, fish like salmon and nuts should be part of healthy diet.

Eat proteins from vegetables, not meat. Protein from peas, beans, nuts are found to improve fertility.

Carbohydrates are important, but slow carbohydrates are better choice. Food rich in fibre such as vegetables, whole grains and fruits are rich in carbohydrates that are digested slowly, improving fertility, controlling blood glucose and insulin levels.

Milk

Other than the few who are lactose intolerant, we pretty much all drink milk. As our body need fat in order to maintain cellular structure. And removing the fat from milk has actually been shown to cause an imbalance of hormones, throughout the body, causing a failure to ovulate or produce a healthy egg. Eating

healthy fats as in milk is helpful in reproduction. The women who ate full fat dairy were found to have a 27% lower risk of infertility. The fat in the whole milk can curb appetite and slow the release of sugar into blood stream, reducing the amount that can be stored as fat. Also fat free dairy products can potentially disrupt hormone balance, an important factor infertility and weight. The process of removing fat from whole milk removes oestrogen and progesterone which are bound to the fat. This leaves behind higher portions of androgens, insulin like growth factor, prolactin and causing an imbalance.

Eat your Iron

Iron rich such as spinach, tomatoes, pumpkin, and whole grains are fertility boosters. Ghee, nuts, sesame seeds, dates, pumpkin seeds, honey, saffron and avocados Fresh, organic fruits and vegetables, protein from plant sources like beans, and peas, sweet, whole grains, juicy fruits such as mangoes, peaches, plums, and pears, asparagus, broccoli, spices such as ajwain powder, turmeric (improves the interaction between hormones and targeted tissues), cumin (purifies the uterus in women and the genitourinary tract in men) and black cumin boost fertility. Foods such as grains, root vegetables, garlicand onions improve circulation and nourish the blood.

Drink Lot of Water

Tea, coffee, coke, chocolates, cappuccinos the list goes on. can be taken in moderations are fine. As caffeine is a nervous stimulant which helps provide that morning pick up for millions of people. Its consumption is responsible for a rise in heart rate, BP, reverse up the metabolism, and increases urine formation. It also increases the length of time to conceive. But exact mechanism is not known. Stay away from sodas, they have been found to increase risk of infertility.

Weight under Control

Both over weight and under weight women are at higher risk of infertility. BMI of 20-24 should be a goal. BMI and weight are closely related to reproductive function. Exercise performed in different amounts and frequencies has varying effect on female infertility. Extreme exercise may lead to anovulation and infertility.

Yoga: it provides benefit to our health. Helps to reset endocrine system, clear the blockages, increases circulation, supports healthy immune system, brings peace and reduces stress.

Ayurvedic Treatment for Infertility

It takes a holistic view about health and treats the body as a whole. The main focus of Ayurvedic treatment for infertility is to ensure proper transformation of food into nutrients that can move to the Shukradhatu.

Some of the Used Treatments for Infertility are

- Swedana: this method induces sweating in patients suffering from infertility with help exercise etc. this is done to flush toxins out of the body.
- ii. *Vaman:* it ultimately detoxifies the body through vomiting.
- iii. *Vata*: dry Vata twak churna with sugar is used to treat infertility.
- iv. Phalagrhitam: Consume in the form of liquefied butter mixed with milk, this medicine treats functional problem and does not structural deficiencies.
- v. *Guduchi*, Gokshura and Triphala churna: is used to clear blockages in the body, which prevent the production of Shukradhatu.
- vi. *Shatavari:* this is the impotant women medicine used in female infertility according to Ayurveda.
- vii. *Diet to Tackle Infertility:* according to Ayurveda person need to follow strict diet apart from avoiding spicy food. Almond, fresh vegetables, whole grains, dairy products, dried fruits. All these provide nutrition to shukradhatu which in turn help conceive.

Summary

According to Ayurveda being healthy and happy is a birth right of each and every human being and its management is addressed by the causative factors. So, dietary habits and lifestyle changes are also one among the cause of female infertility. Diet, exercise and yoga practice are helpful to establish the balance.

As far as dietary modification include one should have healthy diet like proteins from vegetables, not meat. Carbohydrates are important, but slow carbohydrates are better choice.

Eating healthy fats as in milk is helpful in reproduction. Eat iron rich such as spinach, tomatoes, pumpkin, and whole grains are fertility boosters. Drink lot of water and stay from sodas.

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