# Exploring the Overlooked Role of Allium Cepa in Enhancing Male Fertility: A Clinical Reflection from a Homoeopathic Perspective

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Abstract: Allium cepa is one of an important remedy in Homoeopathic Materia Medica. It is a widely prescribed medicine in acute as well as chronic cases. It has been mentioned in all the important Materia Medica. In Homoeopathy, its action on upper respiratory tract and neuralgia has been widely appreciated and its particular action on mucous membrane all over the body is mentioned and prescribed accordingly. However, to the surprise no Materia Medica explained its action on male reproductive system effectively, though modern researches say onion has this wonderful capability of improving fertility in males. On the light of animal studies and lab studies it is proved that allium cepa have this wonderful property of improving male fertility. So when ALLIUM CEPA tincture was prescribed solely for a case of Oligozoospermia when all other medicines failed, there was a marked increase in the sperm count.

Keywords: Allium cepa, male fertility, oligozoospermia, Homoeopathy, sperm count

## 1. Introduction

The onion (Allium cepa), a prominent spice worldwide and a member of the Amaryllidaceae family, is most likely indigenous to southwest Asia. Globally, onions (*Allium cepa L.*) are one of the most cultivated varieties of garden crops. Its physiologically active components, which have a protective (chemoprotective) effect on human health, give it a high nutritional value. Onion eating has been demonstrated in experimental tests to lower blood pressure, promote haematopoiesis, repair the heart and blood arteries, treat asthma, and prevent several types of cancer. Free radicals are squelched by onions, a powerful and adaptable antioxidant. <sup>[1]</sup>

Numerous phytomolecules, including polyphenolic substances, phenolic acids, flavonoids (fisetin, quercetin), ascorbic acid, and sulphur compounds, are found in onions. These compounds give them their colour, flavour, and aroma, and they may also have health benefits like anti - toxic, anticarcinogenic, anti asthmatic, antithrombotic, antiplatelet, and antibiotic effects, as well as the capacity to modulate detoxification systems. Onions have been shown in numerous studies and research projects to have numerous health benefits, including reducing blood uric acid, antidiabetic, hypotensive, hypolipidemic, and improving renal failure. Onions and their primary constituents have also been shown in numerous studies to have a range of protective benefits on the liver, intestine, heart, testis, kidney, blood, bone marrow, and brain, among other organs and tissues.<sup>[1]</sup>

## Allium Cepa and Homoeopathy

Allium cepa is a most common and most widely used homoeopathic remedy in day today life. Carl Linnaeus provided the first formal description of it in his 1753 work Species Plantarum. Since ancient times, onions have been valued for their therapeutic qualities. It was proved by Dr Constantine Hering and added to homoeopathy. The mother tincture is prepared from the fresh red bulbs which abundantly grow in India. It is considered more or less an acute drug. Its main seat of action are on conjunctiva and mucous membranes especially on nose, respiratory tract, intestine, nerves and veins. Its beneficial effect on allergic rhinitis, nasal polypus, neuralgia are well appreciated. Though there are a wide range of symptoms mentioned under allium cepa in different Materia medica from ancient to modern, no single Materia medica provides a valid proof for its action on male reproductive system. <sup>[2] [3]</sup>

#### **Allium Cepa Chemistry**

There are numerous indigenous societies who have been using it for generations to treat a variety of illnesses, such as microbiological infections, respiratory, gastrointestinal, skin, and cardiovascular conditions, diabetes, renal colic, rheumatism, headache, menstrual pain and sexual impotence. Nevertheless, there is now a shortage of up - to - date information that combines the toxicity, biological characteristics, traditional methods, and plant chemistry.<sup>[4]</sup>

Reactive oxygen species (ROS) are formed in cells by external environmental agents and cellular metabolism. Numerous disorders can arise from the overproduction of ROS, which can harm cellular macromolecules such as proteins, lipids, carbohydrates, nucleic acids, and enzymes. Living systems have special methods of overcoming the negative effects of various kinds of injury. But occasionally, these repair systems are unable to keep up with these detrimental effects. Antioxidants are linked to a lower risk of cardiovascular disease and cancer because they scavenge free radicals. Antimicrobial, antispasmodic, anticholesterolemic, hypotensive, hypoglycaemic, antiasthmatic, anticancer, and antioxidant qualities have all been documented for Allium cepa L. Onions have been found to contain polyphenols, anthocyanins, flavonoids, quercetin, kaempferol, and their

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glycosides. The red variety's unused outer layers were a rich source of quercetin (5110  $\mu$ g/g) with significant amounts of AOA and FRSA. They exhibited a notable ability to protect DNA from damage caused by free radicals. <sup>[5]</sup>

Issues with male fertility can include low sperm counts, poor sperm quality, or obstructions in the reproductive system's tubes. Male infertility levels can also be positively or negatively impacted by lifestyle choices and dietary consumption. Male infertility is typically associated with oligospermia, which is characterised by a low sperm count. Nowadays, endogenous and exogeneous antioxidants have been found to be effective for the treatment of male infertility. <sup>[4]</sup>

# 2. New Researches on Allium Cepa

Recent studies proves that allium cepa has a significant positive impact on male reproductive health. One such research is **Effects of** *Allium cepa* **L**. **peels extract on gonadotropins, testosterone and sperm variables in Oba Marshal broiler cocks:** The study finds that, in comparison to the controls, treated birds exhibited considerably higher sperm motility and morphology but non - significant changes in sperm viability and concentration. Serum levels of FSH and LH also rose noticeably. Testicular shape and function were enhanced in test cocks by an aqueous extract of the scaly leaf of Allium cepa. The extract's potential to improve reproductive function could be attributed to its antioxidant properties. <sup>[6]</sup>

Another study is **Protective Effect of Allium cepa (Onion) Seeds (AC) Extract on Histopathology of Testis in STZ -Induced Male Rats:** This is the first study to assess how Allium cepa seed extract protects testis histopathology in rats with STZ - induced diabetes. The results of our investigation showed that by avoiding oxidative stress, Allium cepa seed extract may restore the effects of diabetes disease on the testis histological parameters. The study's findings highlight the use of Allium cepa as a potent antioxidant supplemental food for diabetic males, however it cannot take the role of insulin in the management of the disease. <sup>[7]</sup>

These modern researches suggest a positive effect of this drug on improving male sexual health. **The effects of oral antioxidants on the semen of men with idiopathic oligoasthenoteratozoospermia** suggests that Male infertility is partly caused by oxidative stress, and it has been demonstrated that reactive oxygen species harm sperm membranes and DNA in addition to reducing sperm motility and function.<sup>[8]</sup>

## Case Study of Oligozoospermia

In light of these researches, I experimented with Allium Cepa tincture in a confirmed case of oligozoospermia. **Oligospermia is a medical condition found in men, which is characterised by a low sperm count in their semen.** Man of 38 years old already having a child of 6 years presented with secondary infertility. He and his wife were trying to have a second baby for last 3 years. His sperm count is less than 5 million sperm per millilitre of semen. I took the case he had no other complaints except this and all generals were normal. Thermally a hot patient. I decided to prescribe ALLIUM

CEPA tincture with sac lac. Advised proper diet and exercise. Checked the sperm count after 1 month which showed a gradual increase in sperm count to 9 million per millilitre of sperm. Continued the same medication with ashwagandha tincture (withania somnifera) for rest of the days, after 2 months sperm analysis report showed a significant rise in sperm count to 22 million sperm per millilitre of sperm.

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Figure 1: Before Treatment

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Figure 2: After Treatment

## 3. Conclusion

We have seen the results of medicine Allium Cepa in cases of Respiratory System, Neuralgias and Gastrointestinal System in our daily practice, but as such no evidence of its action on Male Reproductive System is seen. I have tried to present a case, where it has been effectively explained how ALLIUM CEPA affects the male reproductive system. This case study opens the door for further investigation in the field of Homoeopathy by demonstrating its useful characteristic of raising the sperm count in oligozoospermic patients.

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