

**ACUPUNCTURE TREATMENT IN MALE INFERTILITY****Prof. Dr. Jihe Zhu<sup>1</sup>, Dr. Blagica Arsovska<sup>1,2</sup> and BSc Kristina Kozovska\*<sup>1,3</sup>**<sup>1</sup>Faculty of Medical Sciences, University Goce Delchev, Shtip, Republic of Macedonia.<sup>2</sup>Institute of Biology, Faculty of Natural Sciences and Mathematics, Skopje, Republic of Macedonia.<sup>3</sup>Medicine Faculty, St. Cyril and Methodius University of Skopje, Republic of Macedonia.**\*Corresponding Author: BSc Kristina Kozovska**

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**ABSTRACT**

Decreasing of the semen quality is a major contributor to male infertility. According to the theories of TCM, most common causes are weakness of the kidney energy, blockage in the meridians due to dampness and phlegm, blood stasis, stagnation of liver Qi, deficiency in the blood and Qi energy and other. In the article is presented a case of 30 year old male, struggling with infertility. The patient has done 10 acupuncture treatments in a period of two months. The goal of the acupuncture treatments was to improve the sperm quality and quantity. The mobility of the semen and vitality appearance before the treatment was below the normal values – 37.5% (>40%). After only two months of treatment the progressively mobile semen was increased from 31.25% to 40% and the total number of mobile semen was increased to 80%. Acupuncture as a treatment for male infertility gives fast and excellent results by effective stimulation and production of healthy semen and significant improvement in the semen quantity and quality.

**KEYWORDS:** Traditional Chinese medicine, acupuncture, infertility, reproductive system.**1. INTRODUCTION**

When it comes to infertility, the focus is usually on the female reproductive health. Infertility affects men as well and the same attention should be paid to male reproductive health. In many studies published around the world has been indicated that there is a decrease in semen quality in the past few years. Decreasing of the semen quality is a major contributor to male infertility.

There are many different factors that affect the quality of the semen, such as smoking, obesity, alcoholism, sedentary lifestyle, stress, exposure to pesticides, chemicals and heavy metals, poor nutrient intake, physiological factors, genetic factors and other. These factors also affect directly the sperm motility and sperm epididymal maturation.

Other causes are semen agglomeration and agglutination. The semen is not supposed to stick together. It is supposed to move free and swim straight with a healthy shape. Agglutination is not always an indicator for male infertility, but it makes it difficult for the semen to move to the cervix. On the other side, agglomeration is a possible cause for infertility because it decreases the number of the highly mobile semen. However, the biggest impact on male infertility have the physical and mental stress. [Dissanayake DMIH 2019] [Zhu J et al, 2017]

Traditional Chinese Medicine (TCM) for the treatment of male infertility uses combination of acupuncture and herbal medicine to improve the semen quality. According to the theories of TCM, most common causes of male infertility are weakness of the kidney energy, blockage in the meridians due to dampness and phlegm, blood stasis, stagnation of liver Qi, deficiency in the blood and Qi energy and other. [Kok WH, 2021]

Acupuncture treatment as part of the TCM can effectively help in male infertility by increasing the number and percentage of the semen, increasing the production and quality of the semen, dissolving the blockages in the meridians, reducing inflammation, restoring the balance to the entire body, enhancing the local microcirculation, correcting the Qi and blood flow and other. [Zhu J et al, 2017]

**2. CASE REPORT**

In the article is presented a case of 30 year old male, struggling with infertility for more than one year. The patient wasn't taking any other additional medications. The patient is with normal findings. No other previous conditions or abnormalities were detected. The patient has done 10 acupuncture treatments in a period of two months. The goal of the acupuncture treatments was to improve the sperm quality and quantity. The treatments were made in a clinic for Traditional Chinese Medicine and acupuncture by a doctor specialist in acupuncture.

Treatments were made indoor, on a room temperature with duration of 45-60 minutes. In the treatment were used fine sterile disposable needles made by Wuijuiang City Medical Health Material Co., Ltd, with dimensions of 0.25x25 mm. Acupuncture points used in the treatment are: Du20, Du21, Du22, Bl6, Li4, Rn2, St29,

Rn10, Rn6, St25, St36, Sp6, Lr3, B120, B121, B123, Du14 and B126.

Before and after the treatments were made two semen analysis. The results are presented in table 1.

**Table 1: Results from semen analysis done before and after the treatment.**

Analysis	Before	After	Ref. Value
Appearance	Normal	Normal, round cells, granulocytes	Normal Debris Granules present
Liquefaction	Normal	Normal	Normal Incomplete
Color	Normal	Normal	Normal (milky white) Abnormal
Viscosity	Normal	Normal	Normal Abnormal
Volume	3.3	2.5	2-5 ml
pH	7.2	7	7.2-7.8
Agglutination	No	No	No Yes
Leucocytes	No	No	<1x10 <sup>4</sup>
Total number of semen	10.56	70	>39
Total number of semen in 1 ml	3.2	37	>15
Semen motility:			
Progressively mobile	1x10 <sup>4</sup> , <b>31.25%</b>	40%	>32%
Non-progressively mobile	0.2x10 <sup>4</sup>	35%	
Immobile	2x10 <sup>4</sup>	25%	
Totally mobile	1.2x10 <sup>4</sup> , <b>37.5%</b>	80%	>40%

The mobility of the semen and vitality appearance before the treatment was below the normal values – 37.5% (>40%). After only two months of treatment the progressively mobile semen was increased from 31.25% to 40% and the total number of mobile semen was increased to 80%.

The results of the treatment successfully justify our goal to correct the defects in the Yin/Yang energy, keep the healthy semen, enhance the function of the reproductive system, eradicate the blockages and allow the Blood and the energy to flow free through the meridians. [Zhu J et al, 2017]

In order for the Qi energy to remain vital and circulate properly through the meridians, the Yin and Yang energy must be balanced and any blockages or disruptions of the Qi flow that cause diseases must be eradicated. The acupuncture treatment is used to achieve balance of the Ying and Yang energy in the organs, ensure smooth flow of the Qi energy and improve the production of better quality semen. If the meridians are blocked due to dampness, phlegm and blood stasis, the treatment is used to strengthen the spleen energy in order to remove the dampness and phlegm. If there is present liver Qi stagnation (usually due stress) and blood stasis or kidney weakness and deficiency in the Qi and blood, the treatment can help resolve these issues, nourish the

kidney yin and build strong Qi and blood in the body. [Kok WH, 2021]

To fight the infertility, it is essential for the patient to optimize the lifestyle factors as minimizing stress, to be more active, be aware of harmful chemicals and live a healthy lifestyle, in order to maximize fertility. [Dissanayake DMIH et al, 2019] [Kok WH, 2021]

### 3. CONCLUSION

Acupuncture as a treatment for male infertility gives fast and excellent results by effective stimulation and production of healthy semen and significant improvement in the semen quantity and quality.

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### 5. Conflict of interest

The author have declared that no competing interests exist.

### 6. ACKNOWLEDGEMENT

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### 7. Statement of Informed Consent

Written informed consent was obtained from the patient for their anonymized information to be published in this article.

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