ABSTRACT

**Background:** Seminal fluid is an important factor for successful fertility. Sperm dysfunction is the most common cause of male infertility.

**Aim of study:** To compare the sex hormone in patient with azoospermia, Oligozoospermia and Normospermia fertile men as a control To find out the causes of semen viscosity.

**Patients and methods:** Data analysis from azoospermia patient (n = 35) and Oligozoospermia (n = 35) and Normospermia fertile men as a control (n = 13).

**Results:** The results of this study revealed significant reduction (p < 0.05) semen was reduced in azoospermia infertile patient (mean ± Std. Error 0.76 ± 0.21 also reduced in Oligozoospermia 0.71 ± 0.23 while showed no significant FSH & LH level between azoospermia & Oligozoospermia compare with Normospermia fertile men.

**Conclusion:** The viscosity in semen has a strong relationship with low sperm counts is an important factor with sex hormones therefore it is the cause affecting the motile spermatozoa.

**Keywords:** Azoospermia, FSH, LH, Hyperviscosity, Testosterone, Oligozoospermia

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that semen hyperviscosity (SHV) occurs in 12–29% of ejaculates.\textsuperscript{13}

\textbf{MATERIALS AND METHODS}

Semen and serum specimens were collected from azoospermia (n = 35) and Oligozoospermia (n = 35) infertile patients in addition to control group (n = 13) (Fertile Normozoospermia) that attended to fertility center. The average age of infertile patients was (30.21 ± 42) years, the samples were collected are 123 and sample which tested are 88 samples.

A biochemical test was performed on (88) samples had been measured FSH, LH and testosterone Levels by immunological method enzyme-linked-imuno-sorben-t-assay (ELISA) by using ELISA reader (Huma Germany origin). All specimens and reagents must be allowed to come to room temperature before use. All reagents must be mixed softly without foaming. Once the procedure has started, all steps must be completed without interruption, and biochemical tests were conducted in the laboratories of Biology Department/Faculty of Sciences/University of Kufa. The ELISA kits used in this study was (FSH) (ab108641), (LH) (ab178658) and testosterone (ab108666) abcam Company USA in Origin.

\textbf{RESULTS}

The result showed a significant testosterone level in semen was reduced in azoospermia infertile patient (mean ± Std. Error 0.76 ± 0.21 also reduced in Oligozoospermia 0.71 ± 0.23 while showed no significant FSH and LH level between azoospermia & Oligozoospermia compare with Normospermia fertile men

\textbf{DISCUSSION}

The present study show testosterone level was critical abatement in azoospermia, oligozoospermia contrast and Normospermia rich men might be because of increment proof that sperm rot can antagonistically influence spermatogenesis.\textsuperscript{14} The present examination additionally demonstrate that cytokine level a negative relationship was found between cytokine level, with sperms fixation; sperm motility and sperm normal morphology in idiopathic and unexplained fruitless men, these outcome

\textbf{REFERENCES}