The relationship between total motile sperm count and success of intrauterine insemination

Jahaniyan M. (M.D.)¹, Khadem N. (M.D.)², Mousavifar N. (M.D.)², Tourabizadeh A. (M.D.)³, Vahidrodsari F. (M.D.)², Yousefi Z. (M.D.)³, Jalali M.⁴, Shafighi F. (M.S.)⁵.
1- Professor & head of Montaseriyeh Infertility Treatment Center, Mashhad Medical Sciences University, Mashhad, Iran.
2- Assistant Professor, Obs & Gyn Department, Faculty of Medicine, Mashhad Medical Sciences University, Mashhad, Iran.
3- Associate Professor, Obs & Gyn Department, Faculty of Medicine, Mashhad Medical Sciences University, Mashhad, Iran.
4- Specialist of Medical Technology, Montaseriyeh Infertility Treatment Center, Mashhad Medical Sciences University, Mashhad, Iran.
5- M.S. of Midwifery, Montaseriyeh Infertility Treatment Center, Mashhad Medical Sciences University, Mashhad, Iran.

Abstract

Incidence of infertility is approximately 10-15% and intrauterine insemination (IUI) is the suitable method in cases of male infertility. This survey is done on 1017 persons among couples that were being treated with 1258 IUI cycles. The aim of this study was to investigate whether total motile functional sperm count (TMFSC) can be predictive of IUI success or not. In all patients after checking and preparing them for ovulation induction, Semen sample was prepared according to WHO with swim-up procedure and 0.8ml of suspension over sperm pellet was used for insemination. The examination of spermogram and motile functional sperm count was done after sperm processing.

There was a trend toward an increasing percentage of conception with increasing total motile functional sperm rate count and the least of TMFSC was \(20 \times 10^6\) for and with increased TMFSC, success of IUI will increase also. The overall pregnancy rate per cycle was 13.2% and per couple was 16.14% in the infertile couples. This study indicated that the causes of infertility have not any effect on IUI success rate. The duration of infertility has significant difference in pregnant and non pregnant groups.

Keywords: Pregnancy, Male factor infertility, Intrauterin insemination, Spermogram.

Corresponding address: Dr. Jahanian M., Montasriyeh Infertility Treatment Center, Mashhad Medical Sciences University, Mashhad, Iran.
E-mail: Jahanian@yahoo.com