

Semen Analysis

About the Semen Analysis Test

This test provides an indication of how your semen compares with the general population. The following parameters are measured in a semen analysis: volume and consistency of semen, sperm count, percentage of sperm that are progressively motile (moving in a straight line), the strict morphology (structural appearance) of the sperm and sperm survival.

A semen analysis does not diagnose fertility or infertility but provides a relative measure of semen quality compared to the general population of men. It can suggest possible conditions associated with reduced fertilization at IVF and indicate the need for ICSI. A repeat semen analysis will be done with morphology (shape of sperm) within 3-6 months of the in vitro fertilization (IVF) cycle.

Sperm Cryopreservation

Sperm can be frozen and stored for future use in either artificial insemination or IVF. Arrangements for this are made with a local sperm bank. This frozen sperm can be used as a backup should future ability to produce viable sperm be diminished.

Possible reasons for considering sperm cryopreservation are as a precaution when undergoing cancer therapy or prior to a vasectomy if there is a possibility that you may want to have children in the future. Furthermore, during vasectomy or testicular biopsy, it is wise to freeze a specimen of the sperm that is available at the time of the procedure to avoid the potential need for a second surgery. Specimens obtained during surgery will contain low numbers of sperm and can be used only in conjunction with IVF with ICSI.

How Many Ejaculate Specimens should be frozen?

This is decided on a case-by-case basis, depending on the reason for freezing the semen and the semen quality. If semen quality is poor, it is likely that the frozen specimen can be used only in IVF. When this is the case, a single ejaculate is usually as good as several ejaculates since very few sperm are needed for IVF. A single specimen can be frozen in multiple vials for use in multiple IVF attempts. If semen quality is very good and a single ejaculate produces enough sperm for several inseminations, then freezing several ejaculates is a wise option. Although freezing several ejaculates costs more initially, the use of the frozen specimen in artificial insemination is much less expensive, less invasive and has far fewer risks associated with it than the use of IVF.

Requirements

Before semen can be frozen, a consent agreement must be completed. The consent agreement outlines the responsibilities of the laboratory and of you in the process of maintaining the frozen specimen(s). Specimen collection requirements are the same as described above, with special attention to collecting a clean specimen free of contamination.

Requirements for Proper Collection of a Specimen

Refrain from ejaculation for 2 - 4 days before producing the specimen for analysis. Longer or shorter periods of abstinence will result in specimens that yield incorrect indications and are not acceptable for analysis. The semen specimen should be produced by masturbation. Wash your genitals and hands to minimize the chance of contamination of the specimen. Do not use lubricants or saliva when masturbating since potential toxicity to the sperm can adversely influence the results. Collect the ejaculate directly into the specimen cup and replace the lid immediately to prevent contamination. Do not produce the specimen by coitus interruptus (having intercourse and withdrawing the penis prior to ejaculation) or by oral sex. Both activities can lead to a suboptimal specimen, which may yield falsely abnormal semen analysis results. Do not collect the specimen with a condom since they contain chemicals that are toxic to sperm.

Notes

Try not to sit in hot tubs or spas during the three months before the treatment cycle. The use of drugs, alcohol, cigarettes or chewing tobacco should be kept to an absolute minimum during the three months before the treatment cycle. In some cases, the treatment may need to be postponed if a herpes lesion is present at the time of semen collection. If you have a fever of 101°F or higher within three months before the treatment cycle, sperm quality may be adversely affected. The sperm count and motility may appear normal, but fertilization may not occur. If you become sick, please take your temperature morning and night and take Tylenol every four hours to keep your temperature down. Report the fever to the IVF nurse.