

## **OLIGOASTHENOSPERMIA**

# What is oligoasthenospermia ?

involves two semen parameters: sperm count and sperm motility.

The term oligozoospermia is used when the sperm concentration is less than 15 million/ml. Astenozoospermia is used to when we talk about low sperm motility, which is to say, less than 32% of spermatozoids are able to swim properly. This alteration is also known as oligoasthenospermia.

## How do you diagnose it ?

In order to diagnose oligoasthenozoospermia, semen quality has to be examined. This is done by means of a semen analysis or seminogram. It involves analyzing the ejaculate and therefore the main seminal parameters, such as concentration, motility, and morphology.

For a semen analysis to be properly performed, the man must have refrained from sexual activity for 3 to 5 days, and should not have had fever or consumed antibiotics for several weeks. In case he has taken some type of medication, the man should inform the clinic so they can take it into account. The ejaculated semen is analyzed in order to obtain a general overview of the patient's fertility.

## What is Oligospermia?

It is a sperm pathology produced when the sperm concentration is low. It can be called either oligospermia or oligozoospermia. Sperm concentration per milliliter, and the total number of spermatozoa in the ejaculate, are evaluated in a laboratory. The WHO has set a minimum value of 39 million ejaculated sperm/ml, along with a concentration of 15 million sperm/ml.

Men with oligospermia present no symptoms. This means that this alteration can only be diagnosed when men try to start a family and find themselves unable to do so.

#### What is Asthenozoospermia?

Astenozoospermia or astenospermia is produced when sperm motility is seen altered. Specialists analyze sperm motility in accordance with three main factors:

Total motility: all sperms that are able to move.Progressive motility: sperms that are capable of moving forward.Number of immotile spermatozoa: sperms that are incapable of moving.

According to the reference values established by the WHO, 40% of spermatozoids must be fully motile, with 32% being progressive. If the semen sample is below these levels, asthenozoospermia is diagnosed.

There are no symptoms associated with this alteration. It won't be until the very moment a man undergoes a semen analysis because he and his partner are unable to achieve pregnancy when this pathology is diagnosed.



# What are the treatment options and chance of achieving pregnancy?

As a result of the change in semen parameters in the case of oligoasthenozoospermia, makes it very difficult to achieve pregnancy naturally. However, this is indeed not impossible. As long as there is a single motile sperm in the ejaculate, pregnancy can occur. The ideal treatment depends on the case.

Treatable causes like varicoele will be ruled out and surgically corrected if possible and antioxidant therapy may be initiated for improving quality of sperm produced. Complex investigations like sperm DNA fragmentation can guide to discussing therapeutic options. The vast majority of couples may need to resort to a fertility clinic to become parents. Generally, an in vitro fertilization cycle to achieve pregnancy is the treatment of choice. In the laboratory, the best sperms are selected and put into contact with the eggs—which have been previously extracted through follicular puncture. Then, the sperm fertilizes the egg, thereby creating embryos that, after being cultured, are transferred to the woman's womb.

In more severe cases, an ICSI procedure will be required. The steps involved are the same as those needed for IVF, but in this case the specialist selects and inserts the sperm directly inside the egg by means of a microinjection.

For patients with a good prognosis (values close to the normal ones), and if the woman is very young, artificial insemination might be an option. In this case, the best sperms are selected in a laboratory and then inserted, through a catheter, into the female's uterus. In this case, egg fertilization by sperm takes place inside the female reproductive system.

The infertilty specialist, who after all exams, pertinent studies, and evaluation of the situation, recommends the most suitable treatment.

#### Will my offspring have any problem with this treatment ?

Oligospermia" we mean a sperm alteration that affects sperm concentration by lowering it, so only a few sperms present a good quality. However, this does not mean your offspring may develop genetic abnormalities, so there's no reason why oligospermia may lead to the creation of an unhealthy