





## **SHARJAH FERTILITY CENTRE**



#### About UHS

University Hospital Sharjah (UHS) is a tertiary care multispecialty hospital located in the University City area of Sharjah.

It brings together a multidisciplinary team of physicians, nurses and health-care professionals to address the most complex and challenging medical problems for the residence of Sharjah and Northern Emirates. UHS is also an academic institution and enjoys a robust educational affiliation with the Medical College at University of Sharjah.

With the unlimited support of His Highness Sheikh Dr. Sultan bin Mohammed Al Qassimi, University Hospital Sharjah will always endeavor to be the leading healthcare provider in the region.

UNIVERSITY HOSPITAL

#### **Our Service Strength**

325 beds spread across multiple specialties including 210 In-patient beds, 40 Specialty outpatient beds, 34 Emergency beds, 16 ICU beds, 20 Neonatal ICU, 12 Hemodialysis beds, Physiotherapy department, Cardiac Catheterization Laboratory.

Advanced breast cancer treatment and surgical solutions in collaboration with Gustave Roussy Centre.

Regional center of excellence for maternity care with dedicated theatre suite, fetal assessment unit, ultrasound department and neonatal intensive care unit.

First-of-its-kind children's diabetes clinic specialised in providing check-up, follow-up and treatment.

Level 3 NICU equipped to care for babies born at 23 weeks gestation and above as well as babies born with critical illnesses at all gestational ages.

24/7 Emergency Services.24 hours pharmacy.

## "DELIVERING EXCEPTIONAL HEALTHCARE"

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### **Understanding Infertility**

Most people will have the strong desire to conceive a child at some point during their lifetime. Most couples (approximately 85%) will achieve pregnancy within one year of trying, with the greatest likelihood of conception occurring during the earlier months. Only an additional 7% of couples will conceive in the second year. As a result, infertility has come to be defined as the inability to conceive within 12 months. This diagnosis is therefore shared by 15% of couples attempting to conceive. We generally recommend seeking the help of a reproductive endocrinologist if conception has not occurred within 12 months. However, there are various scenarios where one may be advised to seek help earlier.



#### **Infertility in Men**

Infertility in men can be caused by different factors and is typically evaluated by a semen analysis. When a semen analysis is performed, the number of sperm (concentration), motility (movement), and morphology (shape) are assessed by a specialist. A slightly abnormal semen analysis does not mean that a man is necessarily infertile. Instead, a semen analysis helps determine if and how male factors are contributing to infertility.

#### **Disruption of Testicular or Ejaculatory Function**

- Varicoceles, a condition in which the veins on a man's testicles are large and cause them to overheat. The heat may affect the number or shape of the sperm.
- Trauma to the testes may affect sperm production and result in lower number of sperm.
- Unhealthy habits such as heavy alcohol use, smoking, anabolic steroid use, and illicit drug use.
- Use of certain medications and supplements.
- Cancer treatment involving the use of certain types of chemotherapy, radiation, or surgery to remove one or both testicles
- Medical conditions such as diabetes, cystic fibrosis, certain types of autoimmune disorders, and certain types of infections may cause testicular failure.

#### **Hormonal Disorders**

- Improper function of the hypothalamus or pituitary glands. The hypothalamus and pituitary glands in the brain produce hormones that maintain normal testicular function. Production of too much prolactin, a hormone made by the pituitary gland (often due to the presence of a benign pituitary gland tumor), or other conditions that damage or impair the function of the hypothalamus or the pituitary gland may result in low or no sperm production.
- These conditions may include benign and malignant (cancerous) pituitary tumors, congenital adrenal hyperplasia, exposure to too much estrogen, exposure to too much testosterone, Cushing's syndrome, and chronic use of medications called glucocorticoids.

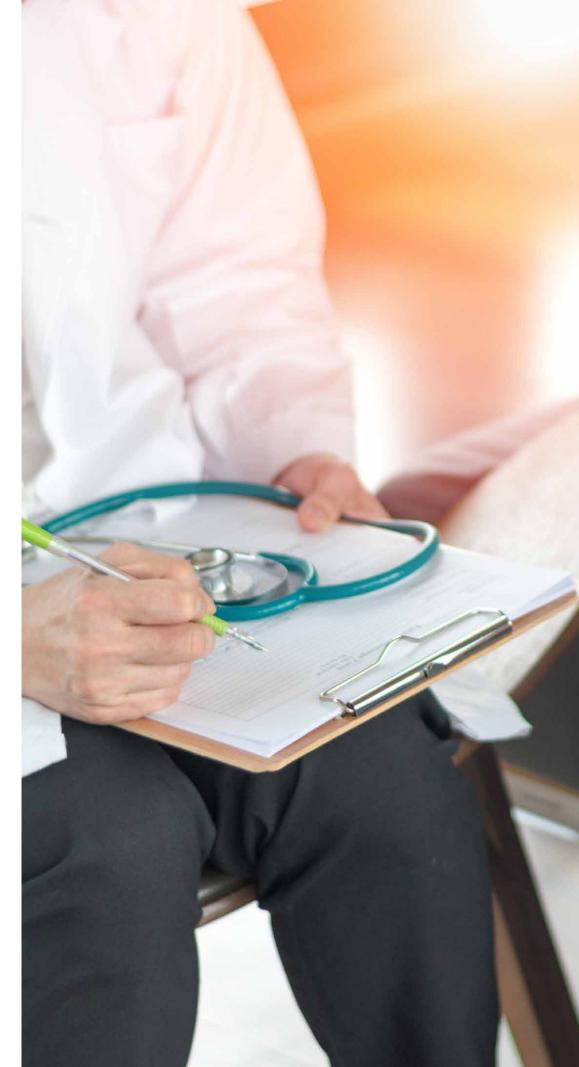


#### **Genetic Disorders**

Genetic conditions such as a Klinefelter's syndrome, Y-chromosome microdeletion, myotonic dystrophy, and other, less common genetic disorders may cause no sperm to be produced, or low numbers of sperm to be produced.

# Factors Increasing Risk of Infertility in Men:

- Age: Although advanced age plays a much more important role in predicting female infertility, couples in which the male partner is 40 years old or older are more likely to report difficulty conceiving.
- Being overweight or obese
- Smoking
- Excessive alcohol use
- Use of marijuana
- Exposure to Testosterone: This may occur when a doctor prescribes testosterone injections, implants, or topical gel for low testosterone, or when a man takes testosterone or similar medications illicitly for the purposes of increasing their muscle mass.
- Exposure to radiation
- Frequent exposure of the testes to high temperatures, such as that which may occur in men confined to a wheelchair, or through frequent sauna or hot tub use
- Exposure to certain medications such as flutamide, cyproterone, bicalutamide, spironolactone, ketoconazole, or cimetidine
- Exposure to environmental toxins including exposure to pesticides, lead, cadmium, or mercury

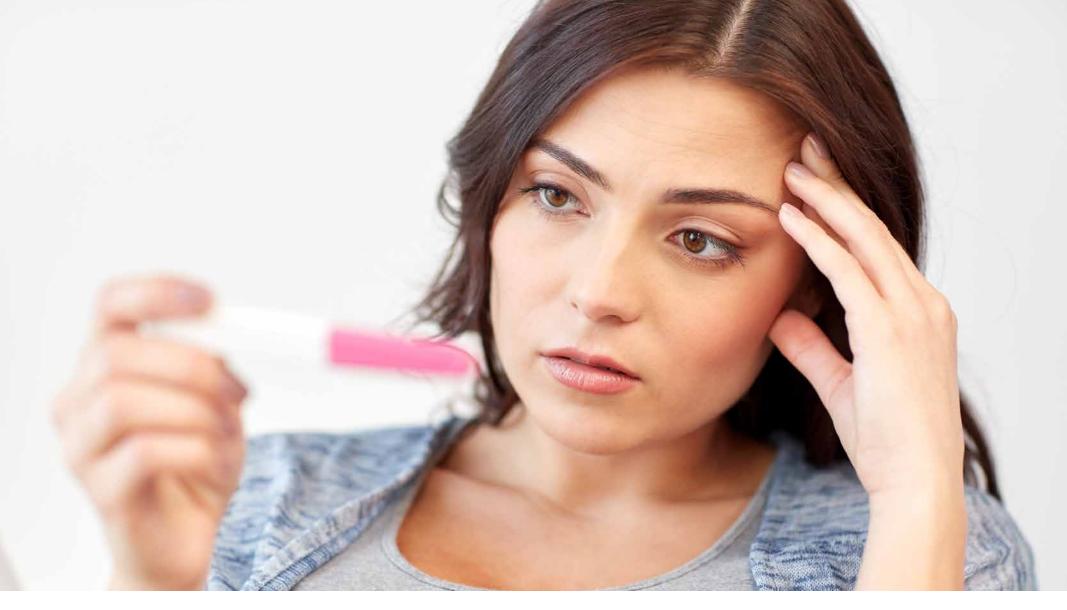


### **Infertility in Women**

Women need functioning ovaries, fallopian tubes, and a uterus to get pregnant. Conditions affecting any one of these organs can contribute to female infertility. Infertility can be present from birth (congenital) or can be acquired as you age. Some of the causes may include:

- Problems with ovulation: Certain conditions, like polycystic ovarian syndrome (ovaries secrete excessive amounts of male hormone testosterone) and hyperprolactinemia (produce high amounts of prolactin, a hormone that induces the production of breast milk), can prevent your ovaries from releasing eggs.
- Damaged fallopian tubes: Fallopian tubes carry the eggs from the ovaries to the uterus. Any damage to them can affect the fertilization of the egg by the sperm. Pelvic surgeries and infections can cause formation of scar tissue that can damage your fallopian tubes.
- Abnormalities of the cervix and uterus: Abnormal mucus production in the cervix, problems with the cervical opening, abnormal shape and presence of benign tumors in the uterus can all contribute to infertility.
- Premature menopause: Mostly caused by a condition known as primary ovarian insufficiency, premature menopause occurs when menstruation stops before the age of 40. The exact cause of this condition is unknown, though various treatments for cancer and abnormalities with the immune system have been known to contribute to it.
- Adhesions: Bands of scar tissue can form in the pelvis after an infection or surgery.
- Other medical conditions: Diabetes, endometriosis, thyroid disorders, and sickle cell disease or kidney diseases can affect the fertility of a woman.
- Medications: Certain medications have been known to cause temporary infertility. Stoppage of those medications can restore fertility in most of the cases.





#### **Factors Increasing Risk of Infertility in Women:**

- Age: More women are waiting until their 30s and 40s to have children. In fact, about 20% of women in the United States now have their first child after age 35. About one-third of couples in which the woman is older than 35 years have fertility problems. Aging not only decreases a woman's chances of having a baby, but also increases her chances of miscarriage and of having a child with a genetic abnormality.
- Aging decreases a woman's chances of having a baby in the following ways:
  - ° She has a smaller number of eggs left.
  - ° Her eggs are not as healthy.
  - ° She is more likely to have health conditions that can cause fertility problems.
  - ° She is more likely to have a miscarriage.
- Smoking.
- Excessive alcohol use.
- Extreme weight gain or loss.
- Excessive physical or emotional stress that results in amenorrhea (absent periods).



#### **Infertility Evaluation**

An infertility evaluation includes exams and tests in trying to find the reason behind a couples infertility. If a cause is found, treatment may be possible. In many cases, infertility can be successfully treated even if no cause is found.

#### When Should Patient Consider Having An Infertility Evaluation and Need Referral to the Fertility Clinic?

You should consider having an infertility evaluation if any of the following apply to you:

- Woman have not become pregnant after 1 year of having regular sexual intercourse without the use of birth control.
- Woman are older than age 35 years and have not become pregnant after trying for 6 months without using birth control.
- Woman are older than age 40 years and have not become pregnant within 6 months of trying without using birth control.
- Woman menstrual cycle is not regular.
- Woman or her husband have a known fertility problem.
- Couple have problem in performing marital relation
- Couple have problem in completing marital relation
- Women whom diagnosed as infertility / or probable infertility by other medical professional
- Patients whom might need fertility preservation before cancer treatment.

### What Tests are Done for Men?

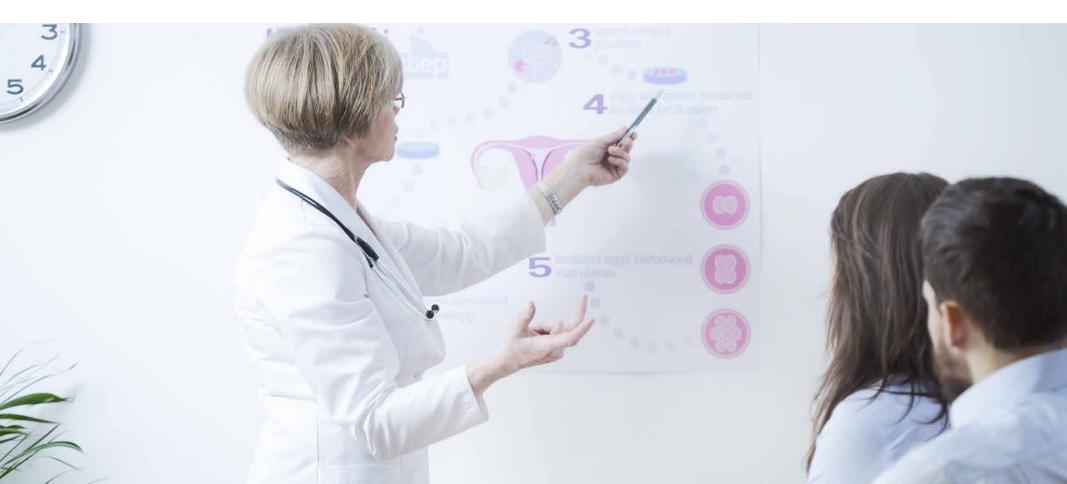
For men patient, doctor will ask some questions and often order tests which might include:

- Semen Analysis
- Blood tests to check male hormone levels.
- Ultrasound -to check if a male organ is abnormal.
- Urine tests to check for any infection.
- Biopsy A biopsy might be done if a sperm test shows that a man has zero or a very small amount of sperm.

### What Tests are Done for Women?

For a women patient, doctor will ask questions about health and will do a full examination. 1 or more of the following tests will be required to conduct:

- Blood tests to check female hormone levels.
- Ultrasound to check uterus and Ovaries.
- Ovulation tests Different tests can be used to check if a woman is ovulating.
- Tests to check the uterus and fallopian tubes –some women have diseased uterus or might have blocked fallopian tubes from past infections or surgery.
- Biopsy A biopsy might be done if a sperm test shows that a man has zero or a very small amount of sperm.





#### **How is Infertility Treated?**

Your doctor will suggest a treatment suitable for your problem. Fertility drugs may be recommended to stimulate and regulate ovulation, in women who are infertile due to ovarian disorders. You could also be chosen for assisted insemination, where healthy sperm is collected, concentrated, and placed directly into your uterus, when your ovary releases eggs to be fertilized. This procedure is also known as intrauterine insemination (IUI), and can be in tandem with your normal menstrual cycle or fertility drugs. Apart from these, problems with your uterus, such as intrauterine polyps or scar tissue, can be treated with surgery.

In vitro fertilization (IVF) is a type of assisted reproductive technique, which involves collecting multiple mature eggs from a woman and fertilizing them with sperm outside the body, in the lab. Once fertilized, the embryos are implanted into the uterus within three to five days.

Some of the other techniques used in IVF include intracytoplasmic sperm injection (a single healthy sperm cell is directly injected into a mature egg), assisted hatching (the outer covering of the embryo is removed to facilitate embryo implantation into the uterus), and using donor eggs or sperm. Gestational surrogates may also be considered for women for whom pregnancy poses high health risks, or for those who have a non-functional uterus.



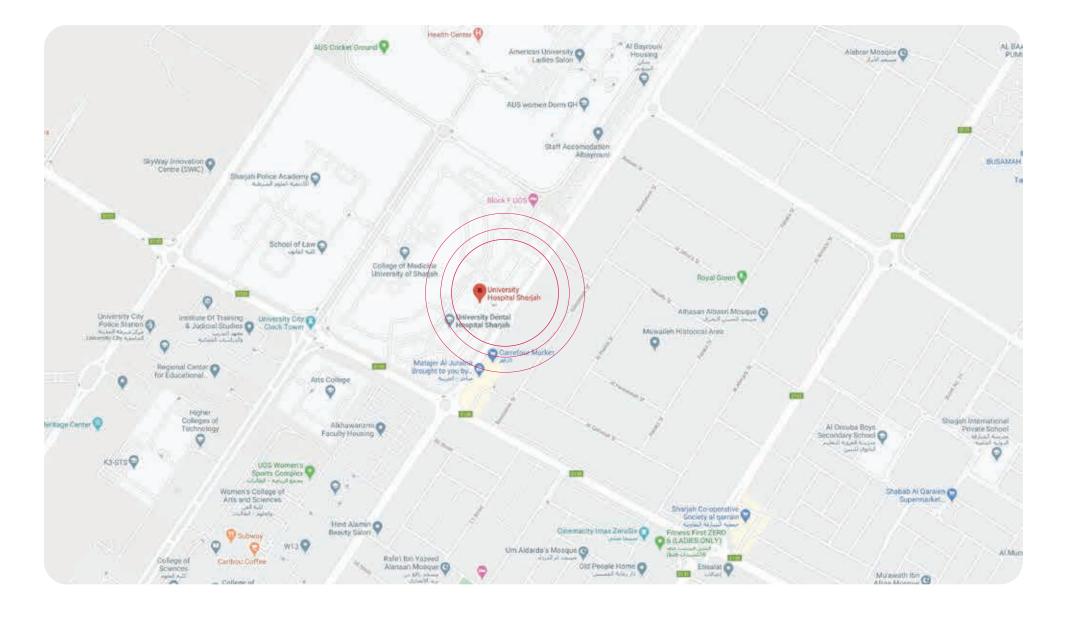
#### **Enhance Your Happiness With IVF**

University Hospital Sharjah has taken the initiative to address fertility related concerns of many couples and bring back happiness by having a dedicated Fertility Centre: 'Sharjah Fertility Centre' under its roof. The Sharjah Fertility Centre uses the latest and most advanced technologies available to solve infertility related problems faced by couples. This unit is supported by well-known doctors and experts.

A range of treatment options at affordable prices are available without any compromise on quality

#### **Services Offered:**

- Artificial Reproductive Technology
- Reproductive Endocrinology
- Female Infertility
- In Vitro Fertilization (IVF)
- Polycystic Ovary Syndrome





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