



OP. DR. HALIL IBRAHIM TEKIN & HIS STAFF

Dr. Halil Ibrahim Tekin was born on the 8th of September in 1962 in the capital city of North Cyprus, Nicosia.

In 2000, was the opening of his founded IVF Centre in Lefkoşa (Nicosia) where he serviced for the next 4 years. This centre was the first IVF Centre in North Cyprus as well as the first Turkish donation centre. By 2014, he had added a helping hand to bless close to 20 000 families with a baby. Now in 2017 with over 20 years experience we not only hold an ISO accreditation but are the only clinic in Europe to have an accreditation from the QHA since 2015. The clinic is working closely with UK Consultants in over 16 clinics across the UK and many more clinics world wide. We pride ourselves on our professionalism, passion and high success rates and are consistently looking for innovative ways to expand.

CROWN IVF CYPRUS

Our clinic offers a full range of male and female fertility investigations and treatments. We are dedicated to providing comprehensive services to all patients with the use of diagnostic testing procedures. Our Doctors, Embryologists and Nursing staff are well trained in complex fertility matters and assisted reproductive technologies. We strive to help couples maximise their chances at pregnancy using the least invasive and most cost effective treatments available.

This booklet has been designed for fertility patients with their needs in mind in order to help educate about fertility, and to encourage participation in treatments. It is comprised of several sections. Some sections are relevant to all patients, while others detail specific tests, procedures and specialized treatment.

We recognise that fertility treatment can be physically and emotionally demanding. Our team will make every attempt to answer your questions, address your concerns and make your experience at clinic a positive one.









Your British and English speaking coordination team are here to guide and help you throughout every step of your journey, to make things run as smooth and stress free as possible.



EGG DONATION

Egg Donation is a well established form of assisted conception. It offers hope for a large number of women who previously thought they could never become pregnant and have children.

It is important that both the donor and the recipient couples be adequately screened, counselled and made aware of the psychological, physiological, moral and legal implications of egg donation before proceeding.

Currently in the UK there is a shortage of egg donors and most clinics have waiting lists of over 2 years or more, in addition to this the law on non-anonymity makes donation there difficult. In North Cyprus egg donors are anonymous, at our clinic we have no waiting list for treatment and matched donors are available immediately.

WHO NEEDS EGG DONATION?

There are a selected group of patients to whom egg donation is recommended.

- Women who have a uterus but whose ovaries do not produce eggs due to premature menopause (affects 1-2% of women under the age of 40)
 - Women who have their ovaries removed as a treatment for cancer, pelvic infection or endometriosis.
 - Women whose ovaries have been damaged by chemotherapy or radiotherapy.
 - Women who were born without functioning ovaries (Turner Syndrome)
 - Women whose ovaries are resistant to stimulation by the pituitary hormones (resistant ovarian syndrome)
 - Women who have had poor ovarian responses to hormonal stimulation.
 - Women who have a high risk of passing on genetic disorders such as haemophilia, muscular dystrophy and Huntington's chorea. (Please see section on PGD in brochure)
 - Couples with recurrent pregnancy loss due to chromosomal abnormalities.
 - Women with recurrent IVF failures, this could be due to poor response to stimulation by fertility drugs, failure of egg collection or poor egg quality.
 - Older women who have poorly functioning ovaries.

SELECTION OF DONORS

There are selected groups of women who may consider donating their eggs. All potential egg donors are made aware of the selection criteria adopted by Crown IVF. These include:

- Egg donors are anonymous and will not be known to the recipient couples. Under Cyprus legislation the donor has a right to remain anonymous. This means that neither the donor nor the intended parents can contact each other at any time. If and when a child results the recipient couple are the sole parents of the child.
- Egg donors should be healthy women, between the ages of 18 and 30 years old.
- There should be no family history of genetic or inheritable diseases
- No history of mental disorders
- No history of sexually transmitted disease, pelvic inflammatory disease or history of DVT or pulmonary embolism because of the increased risk of complications following egg collection.

SCREENING OF DONORS

All prospective egg donors are screened in line with the standards recommended by the UK regulatory bodies such as HEFA and ASRM in order to avoid the risk of transmission of infection to the recipient and offspring and to avoid passing on genetic or inherited disease.

Potential donors are screened for infectious and genetic diseases such as:

- HIV
- Hepatitis B and C
- Cytomegalovirus (CMV)
- Syphilis
- Gonorrhoea

- Chlamydia
- Cystic Fibrosis
- Familial Mediterranean Fever (FMF)
- Sickle cell (in appropriate ethnic groups)
- Thalassemia

All this as well as Blood group and Rhesus factor





SCREENING OF RECIPIENT

Investigations such as ultrasound scans and hysteroscopy may be required to assess the cavity of the womb. Additional tests such as hormone tests, anaemia, blood group and rhesus status for matching with the donor will be carried out.

We also require couples to be screened for HIV, Hep B and C before being accepted for

We match the recipient and donor for ethnic background, physical characteristics such as eye and hair colour, height and weight, build and complexion as closely as possible. We also try to match education level. The majority of our donors are of university level education. We can provide any information we have on the donors' proven fertility.

We use an egg sharing programme and eggs are shared equally between recipients provided that enough eggs are collected we guarantee a minimum of 10 eggs. Exclusivity of donors to recipient couples can happen but there are extra costs involved.

OUTCOME OF EGG DONATION

Pregnancy and live birth rates following egg donation are significantly higher compared to that achieved with IVF using the woman's own eggs. Live birth rates in the region of 65% per treatment cycle should be expected. There are of course many factors that may affect success rates.

> It is important to note that even if a pregnancy does occur problems can arise such as ectopic pregnancy or miscarriage. The likelihood of multiple pregnancy is about 15-20% (usually twins).

EVALUATING THE RECIPIENT COUPLE

A doctor will review the medical and family history and perform a general and internal examination. A full explanation of the treatment and procedures will be provided to the couple. There may be a need for the male partner to provide a sperm specimen for semen analysis.

COUNSELLING FOR RECIPIENT COUPLES

Recipient couples should be aware that they would be the legal parents of any child or children for all purposes and will be responsible for all the costs related to raising a child.

Counsellors may ask the couple how they feel about accepting eggs from someone they know well and are going to be in contact with versus receiving eggs from a complete stranger with only limited details to go on.

They should also be aware of the possible outcome of treatment and the likelihood that pregnancy and live birth may not occur, that they may suffer side effects of medication and the risks of treatment including multiple pregnancy.

Several important points should be discussed during the counselling session including the extent to which genetic and infectious screening was performed on the donor, the cost of the treatment, and the decision as to whether to tell the child of his or her origin.

Women over the age of 55 should be counselled about the welfare of the potential offspring as well as the risks of pregnancy and labour in older women.

SCHEDULE IN CYPRUS

For your initial cycle using Egg Donation you need to be in Cyprus for one week in that week you will have two visits to the clinic.

Your first clinic appointment will be on the day of your chosen donors egg collection. (Please note you will not be in the same area as the donors and will not at any time come into contact with or see donors in the clinic)

The exact date and time of this will not be known until your donor has her final ultrasound scan and the timing of her egg collection decided. At this appointment a sperm sample will be given and consent forms completed. For an optimal sample to be provided 3 days abstinence is to be advised.

INTRACYTOPLASMIC SPERM INJECTION (ICSI)

Intra-cytoplasmic sperm injection (ICSI) is one of the most widely used insemination methods in assisted conception treatments. It is simply the injection of a single sperm cell into one egg. ICSI is especially useful in cases with low sperm count, or poor sperm morphology and also in cases where conventional IVF resulted in poor fertilisation.

As ICSI is an easy technique and results in acceptable fertilisation rates, it is widely used in most clinics around the world.

Under normal circumstances, sperm penetrates the egg membrane by the aid of its motility and certain organelles (structures). This fertilisation procedure enables healthy sperm to be selected while those with abnormal genetic content will be eliminated. During ICSI however, sperm is selected by the embryologist so the selection of unhealthy sperm is visible. While the risk should be kept to a minimum, it has to be remembered that embryos arising from unhealthy sperm (or the egg) will be eliminated during development.

TO WHOM SHOULD ICSI BE APPLIED?

- Patients with poor egg reserves
- Patients with blocked Fallopian tubes
- Failed conventional IVF attempts
- Patients with history of Genetic diseases
- · Patients with Endometriosis
- · Unexplained fertility issues
- With low sperm count, and/or poor sperm morphology or motility

WHAT ARE THE ADVANTAGES?

- A single insemination with the sperm of severe male infertility can be applied to an oocyte
- The quality of sperm can be selected to increase a higher chance of fertilisation and pregnancy
- Application of genetic analysis for the purpose of gender selection

EMBRYO TRANSFER

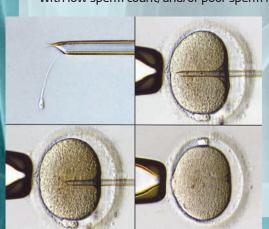
Approximately 3 days after the donor oocytes are fertilised by your partner's or donor sperm, you will come to our clinic for the embryo transfer. On the day of your embryo transfer you will be shown to a private room. Once in the room one of the coordinators will explain what embryos we have to transfer and what, if any, we have to freeze. You will have been asked to attend the clinic with a comfortable full bladder for the transfer as a full bladder allows the Doctor to identify the uterus using a transabdominal ultrasound more easily, it straightens out the cervix and allows the transfer to go more smoothly. You will be offered a disposable gown, slippers and hair net from the clinic.

Once in theatre your personal details and embryo details will be confirmed to you by an embryologist prior to transfer.

You will then be positioned to accommodate embryo transfer. The transfer itself is a simple and painless technique very similar to that of a smear test. An abdominal scan is continuously carried out to assist with transfer. Dr Tekin will insert a speculum, clean any residual Cyclogest from the cervix and transfer embryos using a fine catheter. The embryos will be transferred into the endometrium. This can be observed on a monitor next to the theatre table. All stages will be explained during the procedure. When transfer is complete the catheter will be checked to ensure it is clear and then the speculum will be removed. You will be asked to keep your knees bent and transfer to a trolley which will take you back to your room. You are required to keep your knees bent in this position until told you are ready to leave the clinic.

Before you leave the clinic we will go through a full explanation of what and what not to do following transfer and also explain what medication to take and for how long, and also provide you with dates to carry out pregnancy tests and provide you with dietary recommendations. Copies of this information will also be given to you for review when needed.

Once back in the UK we look forward to hearing about your further progressions and ask that you please do not hesitate to contact your co-ordinators at any time with any questions or concerns you may have.





CRYOPRESERVATION AND DISPOSITION OF EMBRYOS At the end of the cycle, after the required amount of embryos have been transferred (One or two) there may be additional embryos that develop and progress to a high quality level and can then be frozen for further cycles. Embryo freezing will allow you to undergo a subsequent transfer with embryos from your previous cycle. For this you will only need to be in Cyprus for three days. Embryos can be stored at our facility completely free of charge for the first two years. A small charge is then applied for following years. WE HAVE A FROZEN EMBRYO GUARANTEE WITH EGG DONATION CYCLES

SUCCESS RATES

Our success rates are very high related to a combination of high quality oocytes and our team of highly experienced physicians, nurses, embryologists and other laboratory staff.

Our chances for success are significant but there is no guarantee regarding the outcome since the pregnancy is affected by factors that differ in every case. Another risk factor is multiple pregnancy but we take precautions to minimise this by decreasing the number of embryos transferred. A maximum of 2 embryos will be transferred.

Crown IVF Cyprus had a 74% success rate for egg donation patients in the year 2016.

WAITING LIST

There is no waiting list for treatment.

We actively recruit egg donors, the number of our egg donors is not limited and you do not have to wait long, the process of donor screening is very selective and over 70% of potential egg donors are rejected during screening process. The process may be delayed if the recipient couple wants special characteristics in the donor.



Any possible risks are discussed fully with you and your partner before the whole procedure. The physical effects of blood testing and hormone therapy are minimal. The intramuscular injections may be painful and if you have highly sensitive skin you may have some minor reactions at the injection sites.

Also the transfer may carry the risk of cramping and bleeding.



PGD (preimplantation genetic diagnosis) enables embryos to be genetically evaluated before they are implanted into the womb. Laser application to day 3 embryos which display 4 to 10 cells and a single nucleus is performed. On day 5 (blastocyst) trophectoderm biopsy is done where some material is removed from the embryos with suitable morphology with the aid of a biopsy pipette and the appropriate genetic examination is then performed. One may wonder whether this procedure is harmful to the embryo. It has been reported that it does not compromise subsequent embryo development if the procedure is properly and gently performed. According to the result of PGD, embryos with normal genetic content are transferred to the patient.

PGD is applied under these following circumstances:

- after a minimum of two to three failed attempts
- recurrent miscarriages
- hereditary disease in the family history
- advanced maternal age
- diseases that are transmitted with sex chromosomes
- HLA (human leukocyte antigen) typing
- Sex selection (family balancing)

PGD PROCEDURE

The first step is the biopsy procedure. It is performed in the IVF laboratory by an experienced embryologist. Biopsy can be taken from the polar body of the egg before and/or after fertilisation or from the cells of the embryo. The latter is more extensively used. One or two cells are removed from the embryos with the aid of a pipette.

The second step is the fixation procedure. Cells removed from the embryos are fixed onto glass slides. Their genetic content are exposed and sent to the genetic laboratory for evaluation.

At the last step the genetic laboratory examines the material. There are two basic examination techniques; in the FISH (fluorescent in situ hybridization) technique the fixed cells are stained with special probes which detect the abnormality to be examined. As these probes are attached to fluorescent substances they transmit signals under ultraviolet light. Nowadays probes with various colours for every examined chromosome are available, two to three regions of the same preparation can be examined with this technique. The numbers of diseases which can be diagnosed with this technology are increasing day by day.

Another genetic examination technique is PCR (polymerase chain reaction) which is used for detecting single gene disorders.

It is possible that PGD could improve pregnancy rates because it selects embryos that are genetically normal for transfer. However, PGD, is not a therapeutic approach but is a diagnostic tool.

TFSF

HOW PHYSIOTHERAPY HELPS WITH INFERTILITY

Testicular Sperm Extraction (TESE) is the procedure when sperm is extracted directly from the testicle which is a procedure that takes place under sedation at our clinic. The procedure takes up to an hour. Sperm is usually extracted using a needle or a small incision to collect a small sample of tissue to extract the

TESE is a procedure which men with sperm can immediately be used to fertilise eggs by injecting the eggs directly via Intra Cytoplasmic Sperm Injection (ICSI).

There are two main issues where TESE is usually performed:

Obstructive Azoospermia - This is when there is blockage in the ducts that carry the sperm. Males with this condition do have sperm however; the sperm can't travel due to blockages.

Non-obstructive Azoospermia- This is when there is no sperm present in the ejaculate due to the fact that so little sperm is produced.

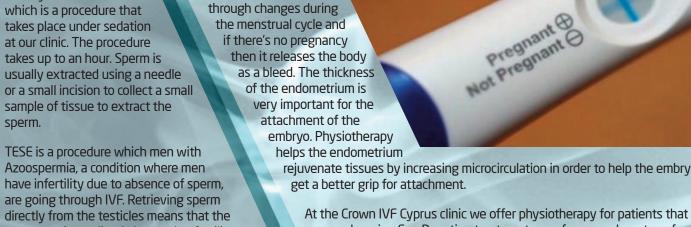
Crown IVF Centre is very successful at coordinating micro-TESE with IVF cycles and have had many successful pregnancies with patients that have been through IVF and TESE.

The Uterus (womb) consists of 3 thick layers. The inner wall is called 'endometrium'. The endometrium goes through changes during the menstrual cycle and if there's no pregnancy then it releases the body as a bleed. The thickness of the endometrium is very important for the attachment of the

rejuvenate tissues by increasing microcirculation in order to help the embryo get a better grip for attachment.

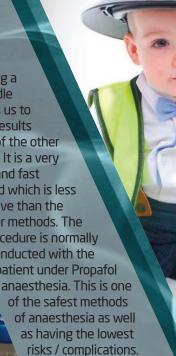
are undergoing Egg Donation treatments or a frozen embryo transfer. We have seen astonishing results during the past 6 years of treatment. The physio has been tested and proved to raise pregnancy rates by 85%.

> Patients will undergo 3 x 40 minute physiotherapy sessions before their embryos transfer. The first session is on the day which progesterone medication is started, the other 2 sessions following one day apart. Patients who are undergoing physiotherapy will have Blastocyst (day 5) embryos transferred. The sessions include heat hydrotherapy, ultrasound and electrotherapy TENS.





sperm. The procedure is performed using a very fine needle which allows us to get better results than any of the other methods. It is a very simple and fast method which is less invasive than the other methods. The procedure is normally conducted with the patient under Propafol



SPERM DONATION

Sperm Donation is necessary for males who have zero sperm count or have poor sperm morphology that prevents them from producing viable sperm. There is unfortunately no treatment to improve sperm quality or quantity. All that patients can do is seek the help in the form of donated Sperm.

Before deciding however whether Sperm donation is the only option, there are techniques to try to gain better quality of sperm. Masturbation is the first option when obtaining a viable sperm sample, if the sperm sample provided shows no sperm or low motility sperm then the guidance of a Urologist, which can perform a prostate massage in order for a sample to be collected and checked under a microscope for viable cells. If this is not successful then surgery is necessary, the different techniques available are TESE. micro TESE, TESA, MESA and PESA, We have applied these techniques within our clinic and have seen success in obtaining viable sperm samples.

In the first instance, couples are given information about sperm donation and the donor sperm. Details of the donor sperm, this involves the screening results and the quality of the sperm is discussed. Before the process begins, couples must accept the terms and conditions as well as sign a consent form and then prepare for treatment. This involves the blood tests being carried out and information on the risks involved with treatment.

SPERM BANK

When sperm donation was introduced to the Turkish Republic of Northern Cyprus, our collaboration with Cryos International Sperm bank in Denmark began. Cryos are an accredited sperm bank that provides not only a wide choice of sperm but also work to European standards.

Sperm banks are not sanctioned within the Turkish Republic of Northern Cyprus, so only accredited companies such as Cryos that are recognized by the Government can be used.



TESTS CARRIED OUT ON SPERM DONORS

Sperm donor candidates are screened for genetic diseases and detailed tests for the screening of sexual transmitted diseases. Also carried out are psychological tests, family characteristics and traits are also recorded, once these are successfully passed only then can the candidate become a sperm donor.

Sperm Count

Normal sperm Low sperm count

95

Sperm Morphology



Once these tests are performed and the necessary criterion is met, a sperm sample is taken from the donor, washed and separated into vials. The sample is then frozen; the donors are then called back after 6 months and undergo the same blood tests. If the testing confirms again that all is clear, the sperm bank can then sell the sperm samples.

Cryos have a particular criterion with their sperm donors producing good quality sperm, but a successful pregnancy is also dependent on the female also. If the female is also a good candidate with a positive response to treatment then the chances of successful pregnancy is 60%.



STAGES OF THE **SURROGACY** TREATMENT PROGRAM

- 1 Selection of the surrogate mother Initial check up for the surrogate mother; Acceptance into our program will require the following;
 - An emotional /psychological assesment by our counsellors
 - Candidate surrogates must undergo a thorough criminal record check via our Law Office
 - Hysterosalpingography intervention (to assure visualisation of fallopian tubes and uterine cavity)
 - Endometrial lining measurement on the 2nd. half of the cyle of the surrogate for implantation success
 - Blood tests
- 2 The surrogate will undergo a pshycological support programme until she has her menstrual period.
- After the period begins the surrogate then starts medication for 17-19 days. As the surrogate undergoes medication treatment, the family's embryo preparation is completed
 - for female oocyte collection parent may use own eggs, donor eggs (anonymous/non anonymous or from a known person or relative of the Intended parents
 - egg donor's screening (Cystic Fibrosis, Karyotyping, HB Electrophoresis) and Toxicology tests will be provided.
 - sperm can be provided by male partner or via sperm donation
 - With same sex male partners sperm may be used from one or the other partner or, both partners can provide a sample where 2 embryos are made and transfered.
- Embryo is transferred to the surrogate mother
- Any remaining embryos that are of suitable and of survivable quality will be frozen for use, if needed in the future.
- The surrogate mother is then monitored by our caretakers for 12 days.
- Pregnancy may be confirmed by doing a urine or blood test on the 12th day after transfer.
 - if result is negative, we then prepare for another cycle. please note if the result is still negative after the third attempt *fresh or frozen*, you have to pay for new embryos to be made.
 - · if results are positive then the follow up of the pregnancy begins
- 8 Pregnancy
 - 8.1 15 days after the positive result is obtained, the baby's sac is monitored on screen to check for reassurance via trans-abdominal ultrasound scan
 - Medication is given everyday, under the supervision of our nurse 8.2
 - 9 week gestational scan performed to confirm heartbeat 8.3
 - 8.4 Surrogate placed in one of our comfortable facilities in Famagusta /Cyprus
 - 8.5 A diet programme conducted by a dietician is pescribed to the surrogate
 - Routine checkups are then carried out up until 8 months of pregnancY
- After the 8th month, the surrogate mother is taken under a strict 24 hour surveillance care at the hospital until she gives birth.
 - 9.1 NST will be taken out daily
 - 9.2 Blood pressure will be controlled
 - Blood and urine tests are carried out weekly 9.3

10 Birth

11 Paperwork is then completed within 15 days after birth and the surrogate mother is sent home and baby is given to family once all final check ups are done

SURROGACY

Crown IVF Cyprus offers surrogacy solutions and services of all kinds under one roof. This includes options for own gametes (egg and sperm) to be used, egg donation (anonymous/non anonymous), or sperm donation, genetic screenings and gender selection. We are proud, to offer services to couples that are married/not married, or wish to embark on single parenting, or same sex parenting.

> We provide a very strongly managed service supporting recipients, surrogates and gamete donors. We understand that the surrogacy process needs to be approached emotionally and professionally. We would happily answer any questions or concerns you may have to support you throughout all procedures with confidence every step of the way.

> > Crown IVF centre's legal team ensures that your legal rights of parenting are affirmed and guaranteed. Whether you obtain a secondparent adoption, judgment of paternity/maternity, or custody orders, we are here to guide you and find solutions that protect your family. It is at upmost importancte to know that we are able to provide the legal status you will need wherever you plan to live with your child to ensure you will be recognised as the parents and can look after your child without any risk of state interference or (worst case scenario) removal.

> > > In addition to our years of experience working with samesex couples, we continue to monitor legal and procedural developments around the world that affect all of our intended parents pursuing surrogacy.



is one name for one child and the other

for the other child. 2 fathers/mothers

names cant be on the birth certificate

at the same time as this has not yet

been restricted.

WE HAVE EXPANDED FOR 2017.

The final preparations are coming together for our brand new clinic. Our IVF suite situated in Famagusta has now completed its build and we are putting our finishing touches on the interior. The new Facility will allow us to continue to specialise with one to one patient care and provide the appropriate treatment to suit our patients needs.

While also providing a professional and welcoming atmosphere.



CROWN IVF SURROGACY MONEY BACK GUARANTEE

CRITERIA AND DETAILS

With our highly experienced team and high success rates we are confident in the ability to provide a successful program for a take-home baby and now are able to offer a MONEY BACK GUARANTEE*

Intended Parents are offered the full fee of payments reimbursed when a take home baby is not supplied within 2.5 yrs of treatment. Criteria for reimbursement is as follows:

Female providing oocytes for embryo preparation must have a minumum of 10 follicles for stimulation/or egg donation is to be used

Sperm must have a minumum 5% motility/or sperm donation is to be used

A minimum of 3 egg collections

All frozen embryos transferred





NORTH CYPRUS

We want your journey to us to also be an experience, which is why we have Patient co-ordinators who specialise in travel, accommodation and what's best to do during your time outside of the clinic. We are able to answer any queries or questions as well as offer you suggestions on your travel to appeal to your budget. Then you have the ability to relax and explore the beautiful island of Cyprus and treat your time here as a holiday.

North Cyprus is located on the crossroads of three continents, 40 miles from Turkey. North Cyprus is bursting with intriguing antiquity and a rich cultural history.

The North Cyprus coastline is astonishingly beautiful with its ancient harbours Al-Fresco dining and sandy beaches that stretch for miles, whilst the depths of the crystal clear azure seas offer many of the region's best diving sites.

The island itself is home to a diverse cultural mix. Cyprus has been occupied since prehistoric times, so the island is dotted with fascinating historic sites including Ancient Roman ruins, Persian palaces, Byzantine churches, Crusader castles, Augustinian abbeys, Venetian harbours and traditional villages. Throughout this time everyone has left their own footprint on our intriguing island. All this and more is just waiting to be explored.

Contact us for further information and advice

