

## HOW TO CONTACT US

### Address;

The Leeds Centre for Reproductive Medicine  
Leeds Teaching Hospitals NHS Trust  
Seacroft Hospital, York Road  
Leeds, West Yorkshire LS14 6UH

### Telephone:

Monday to Friday (8.00am to 5.00pm):

Administrative queries: **0113 206 3100**

Clinical queries: **0113 206 3100**

Saturday, Sunday & Bank Holidays (8.00am to 12.00pm):

Clinical queries only: **0113 206 3102**

When in emergency:

During the above hours please ring the St James's

Hospital switchboard on: **0113 2433144**

You will then be put through to the duty person for  
The Leeds centre for Reproductive Medicine

**Fax: 0113 2063101**

**Website address:** [www.leedsreproductivemedicine.co.uk](http://www.leedsreproductivemedicine.co.uk)

### Ethnic minority Languages:

We will be pleased to organise a session (with prior notice)  
for an official translator or interpreter to be available (if  
available) to translate the contents of this booklet.



The Leeds Centre for  
Reproductive Medicine

Assisted Conception

.....and how we can  
help

## The Leeds Centre of Reproductive Medicine

Welcome to The Leeds Centre of Reproductive Medicine.

The aim of this booklet is to provide a brief introduction to reproductive medicine and information on the following areas:

- Natural conception
- Pre conception advice
- Treatments available
- Miscarriage
- Counselling and support
- Research projects
- Human Fertilisation and Embryology Authority (HFEA)
- Contact names and numbers

### Leaflets are available for the following;

- Diagnostic Techniques (laparoscopy, hysteroscopy, sono-hystero-graphy, hysterosalpingogram)
- Ovulation Induction with Clomifen and Metformin
- Ovulation Induction with Gonadotrophins
- Superovulation & IUI
- IVF treatment
- ICSI treatment
- Surgical sperm retrieval (PESA /MESA/ TESE)
- Frozen Embryo Transfer
- Sperm Donation (donors)
- Sperm donation (recipients)
- Egg Donation (recipients)
- Egg Donation (donors)
- Pre-implantation Genetic Diagnosis
- Surrogacy

The information contained in these leaflets can also be accessed on our website at [www.leedsreproductivemedicine.co.uk](http://www.leedsreproductivemedicine.co.uk)

## HFEA (The Human Fertilisation & Embryology Authority)

The Human Fertilisation & Embryology Authority exists to regulate any clinic which carries out assisted conception procedures involving the removal of eggs and sperm from the body and the transfer of any resulting embryos. It is there to make sure that the patient's best interests are looked after and that the clinic maintains a high standard of practice at all times. Every Reproductive Medicine Unit is registered with the HFEA.

The HFEA produce a range of leaflets about treatments involving eggs and sperm, as well as a detailed patient guide which contains important information about all clinics in the United Kingdom.

More details can be obtained by contacting the HFEA at:

The Human Fertilisation and Embryology Authority  
21 Bloomsbury Street  
London  
WC1B 3HP

- Telephone: 0207-377-5077
- Fax: 0207-377-1871
- [www.hfea.gov.uk](http://www.hfea.gov.uk)

### **Infertility Counselling**

Counselling is provided for individuals and couples to discuss personal, psychological or social effects of their treatment. The counsellor is impartial and your relationship with them is confidential. The service is provided by The Leeds Centre for Reproductive Medicine at no cost or obligation to you. You can access this when required by ringing the direct line for The Centre.

### **Research**

Assisted conception is a complex science which has advanced enormously in recent years. Techniques that were not long ago believed to be possible are common place today.

Our success can only improve with advances in our knowledge gained from the evidence of well conducted research.

You may be invited to consider participating in various research projects.

### **Background:**

Leeds was home to two of the most successful Reproductive Medicine Units (RMU's) in the country. One unit was based within the Clarendon Wing at Leeds General Infirmary and the other was located within the Gledhow Wing at St James's University Hospital. After many years of planning the units have finally merged at the Seacroft site in purpose developed facilities that we hope are more suited to your requirements.

The Leeds Centre of Reproductive Medicine is the largest and most comprehensive service within the UK.

Patients are referred to us with a range of infertility disorders, including early pregnancy loss, and we offer all forms of infertility treatment. Over 1000 new patients are seen on an annual basis with a wide range of diagnoses. Reproductive medicine is at the cutting edge of modern medicine with rapid application to clinical practice of the lessons learned in the scientific laboratory.

The units are supported by the following staff members:

### **Consultants:**



Vinay Sharma



Anthony Rutherford



Adam Balen

We expect to appoint 2 more consultants in due course

Consultant Embryologist: Dr David Morroll

Lead Nurse: Sister Jill Bulmer

Scientific director: Professor Helen Picton.

### **Other medical staff**

There is one sub specialist registrar & 4 research registrars.

### **Embryologists**

There are 14 embryologists & 2 reproductive Technologists in our team.

### **Nursing Staff**

There are 18 nurses and one Ultrasonographer.

### **Counselling**

There are 4 counsellors available.

### **Administrative/secretarial and clerical staff**

There is a small team of administrative/secretarial and clerical staff who provide appropriate support for the two units.

### **Natural conception**

In most women one egg is released during every menstrual cycle. This usually occurs in the middle of the cycle. The first part of the cycle, from the start of the period to ovulation, is called the follicular phase. During this phase, the egg that will be released that month, is selected from a batch of mature eggs, the number of which varies with age. Each egg is surrounded by a layer of hormone-producing cells and together they constitute what is called 'a follicle'.

The follicle that is selected grows under the influence of a hormone called follicle stimulating hormone (FSH). This hormone is released by a small gland at the base of the brain called the 'pituitary gland'. As the follicle grows, a lake of hormone-rich fluid forms around the egg. This can be seen using an ultrasound scan, which produces a picture using harmless sound waves. On the scan, the follicle appears as a black circle in the grey background of the ovary. When the follicle reaches a certain size and the egg is considered mature, a second hormone, Luteinizing Hormone (LH), is released from the pituitary gland. This starts the mechanisms that lead, some 36 hours later, to ovulation (the releasing of the egg)

The hormone-producing cells in the follicle produce the sex hormone oestradiol. This is released into the blood stream and stimulates the lining of the uterus, known as the endometrium, to thicken. After ovulation a second hormone, progesterone, is released.

## **The Referral Process**

The first step to obtain any of the treatments provided at The Leeds Centre for Reproductive Medicine is to visit your General Practitioner for a letter of referral. If you are already a patient at another District General Hospital your Specialist Consultant will send this letter.

There are a number of clinics that you may be referred to;

- **The Infertility clinic**

You may be seen in the infertility clinic for investigations of subfertility and any other associated gynaecological problems.

- **The Reproductive Medicine Unit (RMU clinic)**

This is a special clinic dedicated for couples who have been investigated and for whom the need for IVF, ICSI and similar other treatments is evident. The clinic is staffed by specialist doctors and nurses who will take a detailed history and organise tests with a view to treatment.

- **Urology clinic**

This clinic is for couples when there is an established diagnosis of male infertility e.g. previous vasectomy. Urologists and Infertility specialists will see you in this clinic.

### **Gamete and Embryo donation**

If you have ever considered donating either embryos or gametes, please contact our team on the telephone numbers provided on the back of the leaflet.

### **Miscarriage**

Counselling can be very helpful at this very stressful time. There are specialised doctors and trained counsellors who provide support and advice when a patient has miscarried. They can be contacted to arrange an appointment on the direct line to The Centre (see front page of information booklets).

It is common for a healthy woman to have up to two early miscarriages. When a patient has miscarried three times, this is termed 'recurrent miscarriage'. There is a special clinic for these patients, where appropriate investigations can be organised.

If you would like to talk to someone who has been through the experience of miscarriage or ectopic pregnancy, you can also contact The Miscarriage Association. This is a national charity, which provides support and information for all on the subject of pregnancy loss. They co-ordinate a network of over 200 volunteer telephone contacts and 80 support groups throughout the UK. You can contact them on:

### **The Miscarriage Association**

C/O Clayton Hospital  
Northgate  
Wakefield WF1 3JS

Tel: 01924 200799 (answer phone out of office hours)

From the same hormone-producing cells in the ovary. Together, the oestradiol and progesterone prepare the lining of the uterus for the developing embryo.

The egg is collected by the fimbria, the 'fingers' at the opening of the fallopian tube, which is called the ampulla. If sexual intercourse has occurred, sperm will swim up through the cervix, through the uterus, and along the fallopian tubes to the ampulla.

Although many sperm will surround the egg, only one will enter through its protective coat, the 'zona pellucida', and pass into the egg. A reaction then takes place in the egg so that no more sperm can enter. The fertilised egg (now called an 'embryo') remains in the ampullary part of the fallopian tube for up to 48 to 72 hours before starting the journey to the uterus, arriving in the uterus in about 5 days.

The small embryo has now formed into a cluster of cells known as 'a blastocyst.' This blastocyst comes to rest against the side of the uterus and starts to implant about 6 to 7 days after fertilisation. As implantation is taking place, this small early embryo sends a signal to the ovary, which continues to secrete the sex hormones progesterone and oestradiol. These hormones keep the endometrium favourable for the early pregnancy to continue.

If the egg fails to fertilise, the ovary will stop producing the sex hormones and the endometrium will disintegrate and is shed as a period.

### **Pre-conception advice**

- Smoking
- Alcohol
- Body Mass Index
- Prevention of spina bifida
- Rubella
- Cervical smear

### **Smoking**

There is now a good deal of evidence that suggests that smoking is harmful to both male and female fertility. Put into real terms if a woman smokes 20 cigarettes per day she reduces her natural fertility by over 20% and brings forward the age of menopause by 5 years. Smoking is also harmful to the developing foetus.

Smoking causes major harm to fertility, pregnancy and long term health by increasing the risk of heart attacks, stroke and a number of cancers. A smoker in the family also increases the risk of a Cot Death. Therefore, we strongly advise you to stop smoking prior to trying to start a family.

### **Alcohol**

Excessive consumption of alcohol can reduce fertility in both male and females. Recent evidence suggests that women should not consume more than 5 units per week (a glass of wine = 1 unit). Men should restrict their alcohol intake to less than 10 U per week. High alcohol intake during pregnancy also causes fetal abnormality.

### **Body mass index**

It is important to be normal weight for your height for best chance of pregnancy. Obese men also experience subfertility. Normal BMI is 20-25 kg/m<sup>2</sup>. There is good evidence that BMI of over 30 reduces the chances of pregnancy by 20%. Overweight women also have increased risk of miscarriages, developmental abnormalities in the baby and serious complication in pregnancy or child birth. We advise that fertility treatment should be only performed when the BMI is 35 or less. Ideally it should be over 20 and less than 30. It is also important to know that NHS funding is currently only available to women with a BMI of 30 or less.

### **Prevention of spina bifida**

There is evidence that a small dose of folic acid (400mcg daily) is helpful in lowering the incidence of fetal abnormalities such as spina bifida. All women going through the IVF programme should consider taking this small daily dose of folic acid. Women who suffer from epilepsy should take 5mgs daily.

### **Rubella (German Measles)**

Although most women were vaccinated while at school, the vaccine occasionally is not effective. If you are not immune to rubella and you contract the condition in pregnancy, it can have disastrous effects on the fetus. A simple blood test will show whether or not you are immune. This could be organised either through the hospital clinic or through your GP.

### **Cervical smear**

Regular cervical smears lowers the incidence of cervical cancer. In the United Kingdom women routinely have smears performed every 3 years. You should have a smear within this period before you start treatment. It is not advisable to have treatment or become pregnant if you have an abnormal smear until treatment is complete.

### **Treatments available**

Unfortunately at least 1 in 6 couples will need to consult a doctor for assistance with conception. The Leeds Centre of Reproductive Medicine offers the following investigations and treatments to assist with conception:

#### **Referral**

Referral process and outpatients

#### **Investigations**

##### *Woman*

- Examination
- Blood tests
- Ultrasound scan
- Sonohysterography
- Tubal patency tests (hysterosalpingogram & laparoscopy)

##### *Man*

- Examination
- Blood tests
- Ultrasound scan
- Semen analysis

#### **Treatments**

- Ovulation Induction
- Intra Uterine Insemination
- Donor Sperm Insemination
- In Vitro Fertilisation (IVF)
- Frozen Embryo Transfer
- Intra Cytoplasmic Sperm Injection (ICSI)
- Micro Epididymal Sperm Aspiration (MESA)
- Percutaneous Epididymal Sperm Aspiration (PESA)
- Egg donation
- Embryo donation
- Surrogacy
- Pre-implantation Genetic Diagnosis (PGD)