

What is IVF?

In vitro fertilisation - IVF - literally means fertilisation 'in glass'. Instead of the sperm entering the egg (oocyte) within the body (in vivo), it does so within the laboratory in a sterile, disposable dish. IVF using the standard insemination technique requires about 150,000 sperm for each egg.

Who may benefit?

- women with blocked Fallopian tubes
- men and women with 'unexplained infertility'
- moderately poor sperm function

IVF is not suitable for couples where the man has poor quality sperm or no sperm at all (azoospermia), unless donor sperm is used.

What does treatment involve?

To give a good chance of pregnancy, the woman's ovaries are stimulated using fertility drugs which start the growth of several follicles, the small fluid filled sacs on the ovaries where the eggs are produced. Stimulation is carefully monitored to produce several eggs which can be collected and possibly fertilised and some may then be transferred to the woman's uterus.

Different methods - or protocols - may be used to stimulate the ovaries and each patient is individually assessed before a decision is made about the recommended protocol. The long protocol is the most usual method of stimulation at MFS and is outlined below. If a short protocol is recommended, a nurse or doctor will discuss this in detail and provide the relevant treatment plan.

The clinical staff will carefully prepare the woman's ovaries for stimulation and control the rate of growth of the follicles within them:

- daily injections or a nasal spray over two to three weeks 'down regulate' the woman's normal monthly cycle to a temporary menopausal state
- daily injections of gonadotrophin drugs for 10 to 14 days stimulate the ovaries to produce more eggs than occur in a natural cycle. The dose of drugs is carefully calculated to optimise the chance of pregnancy for each patient

- regular ultrasound scans monitor the number and size of the growing follicles. When these have grown sufficiently, the patient will be advised of the day of her egg collection (usually about two weeks after she first starts taking the stimulating drugs)
- egg collection is performed with ultrasound guidance under conscious sedation and with pain relief (see MFS infosheet 'Egg Collection and Fertilisation')
- where partner sperm is to be used, the sample must be produced at the clinic immediately before egg collection (see MFS infosheet 'Producing a Sperm Sample for Use in Treatment')
- IVF using the standard insemination technique needs approximately 150,000 good quality sperm for each egg. The inseminated eggs are placed in an incubator and checked the following morning for signs of normal fertilisation
- the fertilised eggs (embryos) are cultured before the embryo transfer, which takes place two to six days after fertilisation, when one or two of the best quality embryos will be placed in the uterus (see MFS infosheet 'Embryo Transfer and the 2 Week Wait')
- any remaining good quality embryos can be frozen and stored for any future attempts to conceive (see MFS infosheet 'Embryo Freezing')
- a pregnancy test may be done 10 to 14 days after embryo transfer

What is included in the cost?

- treatment planning
- monitoring scans
- injections training
- egg collection
- sperm preparation
- fertilisation of eggs
- first embryo transfer
- freezing of suitable embryos and storage for the first year
- pregnancy test
- six week scan or follow-up review

What is not included in the cost?

- HFEA levy
- electronic witnessing fee
- drugs
- any subsequent frozen embryo transfer
- any other fertility investigations, treatments or preservation services for either partner

Success rates

Please refer to midlandfertility.com/success-rates for details of the most recent published results.

Costs

Please refer to the current List of Charges in either the Patient Finance Information leaflet or via midlandfertility.com/fees.

Further information

Please visit midlandfertility.com and search for 'Treatments' or read the following MFS infosheet:

- Counselling
- Giving Injections
- Egg Collection and Fertilisation
- Producing a Sperm Sample for use in Treatment
- OR, Fertility Treatment with Donor Sperm
- Embryo Transfer and the 2 Week Wait
- Blastocyst Transfer
- Embryo Freezing
- Frozen Embryo Transfer

(downloadable from midlandfertility.com by searching for 'MFS Treatment Literature', or in hardcopy from MFS).