Patient Information

Single Embryo Transfer

Shropshire and Mid Wales Fertility Centre

Address: Severn Fields Health Village, Sundorne Road, Shrewsbury SY1 4RQ.

Tel:01743 261202
Introduction

*Please be aware that if you fit the criteria for Single Embryo Transfer, you will not be eligible to have two embryos transferred.*

At the Shropshire & Mid-Wales Fertility Centre we aim to reduce the possibility of multiple pregnancy, (carrying twins or more), because of the risks it can pose to baby and mother.

A policy has been agreed by several Fertility Clinics across the West Midlands to reduce multiple pregnancy, emphasizing our commitment to safe care.

The goal of our fertility treatment is the delivery of a single, healthy baby, born at full term. This means that in some cases we will only transfer a single embryo rather than the maximum of two.

*Why have we Introduced a Single Embryo Transfer Policy?*

Multiple births are the single biggest risk to mothers and children. All the risks of pregnancy and birth are significantly increased for women who are pregnant with more than one baby. These include:

- Miscarriage, hypertension (high blood pressure)/pre-eclampsia, gestational diabetes, anaemia, haemorrhage, early labour and caesarean section or delivery with forceps.
- Although the risk of maternal death is still small, it is doubled for women expecting twins compared to women who are pregnant with a single baby (known as a singleton).

*What are the risks to my babies?*

The chances of illness, disability and death are highly increased for multiple pregnancies, because the babies are more likely to be born prematurely, have a low birth weight and need specialist care. Not to mention the long term problems that these babies can face throughout life. The risk of death around the time of birth is 3-6 times higher for twins than singletons. In more detail:

- 50% of twins are born prematurely (before 37 weeks of pregnancy) and have low birth weight (less than 2500gms or 5.5lbs).
- Over 90% of triplets are born prematurely (before 37 weeks of pregnancy). Many are born so early that they have a greater risk of long-lasting, serious health problems or may die soon after birth.
- Between 40–60% of IVF twins need to be transferred to the intensive care unit when they are born. Only 20% of singleton IVF babies need the same level of care.
- 8% of twins need help with their breathing and 6% suffer from respiratory distress syndrome compared with 1.5% and 0.8% for singletons respectively.
- The overall risk of death during birth or the first year of life is higher for twins than for singletons.
- The risk of death around the time of birth is 3-6 times higher for twins and 9 times higher for triplets. A recent study estimated that if all IVF babies born in the UK in 2003 had been singletons, the deaths of 126 babies could have been avoided.

*Is there a risk of longer term problems?*

Unfortunately there is. Twins and multiple pregnancies are more likely to suffer from
· severe health problems that will affect their entire lives (for example cerebral palsy, impaired sight and congenital heart disease (which affects between 4 and 6 times as many twins compared with singleton babies). Other studies link
· Prematurity and low birth weight with lower IQ, Attention Deficit Hyperactivity Disorder and long-lasting behavioural difficulties.
· Problems with language development are more common with twins.

*What does Single Embryo Transfer Mean for Me?*

If you are eligible for a Single Embryo Transfer, your Embryo may be transferred at the Blastocyst stage (Day 5) as opposed to the more common Day 3 Embryo transfer.

*Who qualifies for a Single Embryo Transfer?*

You will qualify for single transfer if you meet the following criteria:-

· You are less than 37 years old
· You are having your first or second cycle of treatment
· It is your third or more cycle of treatment and you had single embryo transfer in both, or at least the most recent, cycle of treatment
· You have at least 1 ‘grade 1’ (7 cell) embryo on day 3 of treatment and a minimum of 4 viable embryos or you have at least 2 ‘grade 2’ (7 cell) embryos on day 3 of treatment and a minimum of 6 viable embryos

If you meet the above criteria, you will have the choice of having a single Blastocyst Transfer 5 or 6 days after egg collection or a single embryo transfer 3 days after egg collection. The centre reserves the right to transfer a single embryo in any case where there is an increased risk of twin pregnancy.

*If I can have two embryos back due to their quality or my age, what are the chances of a twin pregnancy?*

Our policy is designed to lower the number of couples that have twins, however, as long as you have two embryos replaced there is still a chance that you will have twins, whatever the embryo grade replaced. If you want to avoid twins you need to ask for a single embryo transfer.

*What is a Blastocyst Transfer?*

Blastocyst transfer is the transfer of the embryo on day 5 or 6 rather than day 3.

*What is a Blastocyst?*

‘Blastocyst’ is the name given to an embryo 5 and/or days after it has begun to develop. By this stage there are dozens of cells within the embryo and 3 distinct areas:-

· The ‘inner cell mass’ contains the cells that would become the fetus if the blastocyst implanted in the uterus
· The ‘Trophectoderm’ are a single layer of cells around the outside of the embryo
· The ‘Blastocoele’ is a fluid filled cavity in the middle of the blastocyst.
**Why do we perform Blastocyst Transfers?**

We perform blastocyst transfers in patients who look like they have a very high chance of a twin pregnancy. As we only ever transfer one blastocyst, the chances of twins are greatly reduced.

**What are the Advantages and Disadvantages?**

The advantage of blastocyst transfer is that if you are fortunate enough to have a blastocyst develop, it has a higher chance of achieving a pregnancy than a single ‘day 3’ embryo.

The disadvantage is that if we attempt to culture your embryos to the blastocyst stage, there is a possibility that no blastocysts will develop and the treatment will have to be abandoned.

It is important to note that if you qualify for Blastocyst transfer, all of your embryos will be cultured (grown) on to day 5 or 6 as this increases the chances of getting a blastocyst.

**If I qualify for a Blastocyst Transfer, do I have to have one?**

No, even if you do fit the criteria, if you do not want to wait until the Blastocyst stage and would rather have a single embryo transfer on Day 3, you can do this.

**What will Happen to the Other Embryos that are not Used?**

Any high quality blastocysts (or day 3 embryos) that develop in addition to the one that is transferred can be frozen for future use in Frozen Embryo Transfer cycles.

**Will my Treatment Still be the Same?**

Yes, your treatment will be the same right up until the transfer stage. You will be informed on day 3 after your egg collection, if you qualify for blastocyst transfer. If you do then you will wait a further 2 days before having the embryo transferred back into your uterus. So, if you have an egg collection on a Monday, then you will be told on the Thursday morning if you qualify for blastocyst transfer and your embryo transfer will take place on Saturday or Sunday.

If you a private patient please note there is an additional charge to cover the specialist laboratory work required to culture the embryo to blastocyst stage.

**Contact details for more information**

**Useful telephone numbers**

Fertility nursing team 01743 261202 or call the hospital switchboard on 01743 261000 and ask to be put through to the Fertility unit. Please note the department accepts calls from 9am to 5pm Monday to Friday.
Further information is available from;

**Patient Advise and Liaison Service (PALS)**
We act on your behalf when handling patient and family concerns, liaising with staff, managers and where appropriate, relevant organisations to negotiate immediate or prompt solutions. We can also help you get support from other local or national agencies.

Royal Shrewsbury Hospital, Tel: 0800 783 0057 or 01743 261691
Princess Royal Hospital, Tel: 01952 282888

**Other Sources of Information**

**NHS 111**
A fast and easy way to get the right help, whatever the time. NHS 111 is available 24 hours a day, 365 days of the year.
Telephone: 111 (free from a landline or mobile)
Website: [www.nhs.uk](http://www.nhs.uk)

**Patient UK**
Provides leaflets on health and disease translated into 11 other languages as well as links to national support/self-help groups and a directory of UK health websites.
Website: [www.patient.info](http://www.patient.info)

**Special Needs Information**
Please contact the Fertility Unit to discuss.