Embryo Transfer – How best to prepare for it



By **Professor Luciano Nardo**, consultant gynaecologist and subspecialist in reproductive medicine and surgery and founder of NOW-fertility

What to expect when it's time for your embryo transfer

You've come through the first three important stages of IVF – ovarian stimulation, egg recovery and insemination, and now it's time for the fourth and final stage – embryo transfer.

There are different types of transfer: fresh, frozen, cleavage (day two or three), blastocyst (day five or six), single, and multiple embryo transfer. Your IVF clinic will be able to advise you about the type of transfer that is most appropriate for you based on how many embryos develop, the health of those embryos and your IVF history.

How to prepare for your embryo transfer?

On the day of your embryo transfer, it's fine to shower as usual in the morning. Be sure to wear comfortable clothes that are easy to remove and don't wear any fragrances, or perfumed body lotions.

Assuming your transfer is going ahead without you being sedated (in some cases sedation is given, but it's worth bearing in mind that this usually attracts an additional charge by the clinic) you can eat and drink as normal beforehand: Try and drink a few glasses of water before you arrive to the centre as you will be asked to keep a moderately full bladder, as this allows good ultrasound visualisation of the catheter used to transfer the embryo(s), and position of the uterus.

If you are opting to be sedated, follow any advice your clinic gives you about when your last meal and drink should be before the procedure.

Take any medications that have been prescribed

for you exactly as instructed, but you may be asked to refrain from taking anything that is inserted vaginally (such as a pessary) the morning of the transfer.

What will happen before your embryo transfer?

When you arrive at your clinic, you will be taken to the admission area where a nurse will issue paperwork for you to complete. If you have received the consent forms electronically before the day of transfer, ensure you have read and signed them – and of course have them with you.

In preparation for the transfer, your physician and the embryologist will discuss the number, grade and quality of embryo(s) to be transferred and you will be advised if there are supernumerary (spare) embryos which would be suitable for freezing on the same day as the transfer. Your physician will also advise if they believe any of these embryos need to be observed until the following day before a decision to freeze them is made.

Most clinics offer patients the option of freezing spare embryos, but not all embryos survive the procedure and implantation rates may be lower than with embryos which are transferred fresh.

What happens during your embryo transfer?

The embryo transfer itself is actually a simple procedure. Prior to the transfer, the physician and the embryologist will confirm your name and date-of-birth to make sure it matches the identifying information on the embryo(s).

Your physician will insert a speculum into your

vagina (similar to taking a smear test) to visualise the cervix, which will then be cleaned gently to remove any mucous and discharge.

They will then insert a long, thin catheter containing the embryo(s), along with a small amount of culture media, which are then passed through the cervix into the uterus, where the embryo(s) are released.

Your physician will perform a transabdominal ultrasound simultaneously as the transfer is performed to ensure optimal placement of the embryo(s) inside the uterus.

For most women, the procedure isn't painful, but it is entirely normal to feel minor to mild discomfort from the speculum, or from having a full bladder. After your clinician has completed the embryo transfer you will be asked to lie on your back to rest for a short time.

If you need additional medications your fertility team may dispense them on the day of your transfer, or give you a prescription to get them from your local pharmacy.

Single or multiple embryo transfer?

In the past, it was usual for multiple embryos to be transferred to give IVF patients a better chance of at least one successful implantation. However, there is significantly greater risk from multiple pregnancies, so nowadays, unless there is a sound clinical reason for doing so, generally physicians only transfer single embryos.

If you have concerns about single embryo transfer, you should speak to your clinician who will be able to explain in detail what is being recommended for you and why.

Side effects you may experience after your embryo transfer

You can expect to experience some minor side effects after your procedure. These may include minimal vaginal spotting immediately after the transfer.

You may also experience minimal vaginal spotting a few days prior to the date of your pregnancy test, menstrual-like cramps and bloating, pelvic and/or lower back pain and some mild soreness in your vaginal area.

Once you are home and until the date of your pregnancy test

You'll be able to go home after your embryo transfer and you will be advised to take things easy and rest for the remainder of the day.

You should continue with your hormone medications as advised by your fertility team until the date of your pregnancy test; this is usually 10-12 days after your embryo transfer.

You can expect to resume your normal activities and work the day after your transfer. In the meantime, continue to take all medications as instructed by your fertility team. You may be offered progesterone pessaries, gels, or injections after your embryo transfer to support the lining of your womb.

If you are also taking any pain relief, or medication for a high temperature, nausea, or constipation, these may be allowed, but be sure to consult with your physician first.

Don't do any vigorous physical activity or go swimming and avoid sexual intercourse in the days between your transfer and pregnancy test. Also avoid any activity that raises your body temperature, such as having a sauna, massage, steam room, jacuzzi, hot yoga, or heat pads.

You should also avoid all alcohol, smoking and caffeine, prolonged sun exposure and late nights. Take the time to relax and connect with your partner and friends in the waiting time between transfer and pregnancy test, and try to maintain a calm, positive outlook.

Reasons for cancelling the embryo transfer

Sometimes your clinical team may decide to postpone or cancel your embryo transfer. There are several reasons why they may decide this is the right thing to do. These may include:

- You may not be medically well enough
- You may have symptoms of Ovarian Hyperstimulation Syndrome (OHSS). This only occurs in approximately two to three percent of IVF patients,

but it can have serious side effects resulting in vomiting, abdominal swelling, and shortness of breath. It usually occurs after the hCG (human chorionic gonadotrophin) injection given to help egg maturation.

- The embryos haven't progressed adequately to the stage of development suitable for transfer
- The procedure cannot be performed without sedation and the anaesthetist is not available on the day
- You have fluid or blood in your uterus revealed by the transabdominal ultrasound scan on the day of transfer
- You have started bleeding and the lining of your uterus (womb) is thinner than before
- You have forgotten to take your hormone medications as recommended by your fertility team
- You have decided, since egg collection, to have the embryo(s) genetically tested before transfer

According to Professor Luciano Nardo, Founder & CEO of **NOW-fertility.com**:

"Of course embryo transfer is an important step in IVF treatment, so it's entirely natural for patients to be nervous. I always go through all of the above points with my patients and try to put them at their ease ahead of embryo transfer. I also advise all patients to ensure a partner or friend is with them as much as possible during any procedure and there to support them both physically and emotionally between the time of the embryo transfer and subsequent pregnancy test."

element of the transfer process, don't hesitate to ask your clinician: in fact, write down any questions that come to mind so you don't forget to ask them. If you are not trying to remember questions, or worried about what to ask, this will help to reduce your stress in the days leading up to your embryo transfer and on the day itself."

Explanation of terms

Embryo: An embryo refers to the early developmental stage following the fertilisation of an egg (derived from a female) by sperm (derived from a male) as a method of sexual reproduction.

Embryologist: A scientist involved in reproductive research or fertility assessments.

Cleavage: In embryology, cleavage is the division of cells in the early development of the embryo, following fertilisation. This takes place at day two or three after fertilisation.

Blastocyst: A blastocyst forms when a fertilised egg is in its second phase of growth. This takes place from days five to nine after fertilisation

Uterus: The womb

Cervix: The narrow passage forming the lower end of the uterus.

Transabdominal ultrasound scan: A safe and non-invasive visualisation test used to take images of internal organs which does not use radiation but instead involves directing high-frequency sound waves to the uterus.



Embryo Transfer Do's and Don'ts

- Make a list of any questions you and your partner have for your IVF clinic team
- Do talk through any concerns with your partner, friends, and family, and of course your physician in advance of your embryo transfer – this will help calm any nerves
- Do eat healthily and avoid alcohol and caffeine in the days leading up to and immediately after your embryo transfer
- Continue to take any medications prescribed by your clinic team
- Immediately report any nausea or abdominal pain either before or after your transfer
- On the day of your transfer, wear loose, comfortable clothing that's easy to get on and off
- Discuss with your clinic if you'd like any spare embryos to be frozen and the process for doing this
- Discuss with your physician what side effects, if any, you might expect immediately after your embryo transfer
- Rest immediately after your transfer, but so long as you feel well the next day, you should be fine to get back to your normal routine
 - Don't forget to chat through any concerns with your physician
 Don't forget to take any signed paperwork
 and consent forms with you on the day of your transfer
 Don't wear perfume or scented body lotions on the day of your embryo transfer
 Don't worry about the procedure being painful most women
 - experience only mild discomfort. If you are concerned, don't be afraid to speak with your physician about sedation
 - Don't have sex, stay out late, or undertake vigorous exercise in the first few days immediately after your transfer
 - Don't do anything to raise your temperature in the days immediately after your transfer
 - Don't be alarmed by mild vaginal spotting a few days before your pregnancy test – this is completely normal
 - Don't stop taking any prescribed medicines unless your clinical team expressly tells you to do so