

WANGRASMUSSEN/ROBERTMUNZBERG

A guide to
managing infertility



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Introduction

The desire to have a child is natural, and most women plan on experiencing pregnancy and childbirth at a certain point in their adult lives. Although conceiving a child may seem like the easiest thing in the world, it is actually not the case for many couples.

This booklet explores the implications of infertility and treatment options—the effects it can have on you, your emotions, your sexuality and your relationships. It also outlines a number of ways in which you and your partner can cope with the problem of infertility. At the back of the booklet, you will find a section suited for notes, telephone numbers, or questions for your doctor.

We hope that this booklet will be of use to you.



Background on infertility

Infertility is generally defined as the inability to conceive after one year of trying to become pregnant. Most couples assume that they are fertile and expect to conceive soon after they stop using birth control. However, almost 10 percent of all women of childbearing age are infertile, and about one quarter will experience at least one period of infertility sometime during their lives.

Causes of infertility

Most couples that have difficulties achieving pregnancy are not sterile, but are usually infertile or subfertile (having a reduced chance of conceiving spontaneously in the normal way).

The most common known causes of infertility are spermatozoal defects, ovulatory disorders and tubal disease. But the biggest group is due to “unexplained infertility”. This is when a couple fails to conceive after about 18 months of regular intercourse, and no cause is found.

Among couples who seek medical help, infertility is exclusively a problem in the female in about 40% of cases, and exclusively in the male in about 30% of cases. In the balance of cases, infertility results from problems in both partners or the cause of the infertility cannot be explained.

- The World Health Organisation believes that between 60 million to 80 million couples in the world are infertile.
- Between 2 – 10% of couples are unable to conceive a child by natural means, and a further 10 – 25% are unable to have a second or subsequent child.
- It is estimated that about 1 in 6 couples seek



help in trying to achieve a pregnancy. This help can range from basic advice from their doctor to undergoing in vitro fertilisation (IVF) therapy.

Treatment offers hope

A diagnosis of infertility does not have to mean childlessness. It can often just mean that becoming pregnant is a challenge—one that can be aided significantly by medical treatment. Today's treatments offer a good rate of success, and approximately three out of four women will get pregnant as a result of treatment.

Experiencing infertility

To have your own family is a universal dream, and the thought of not being able to can make you and your partner feel that something is wrong with you.

Learning that you have an infertility problem can lead to painful and difficult emotions. It involves rethinking many things you may have taken for granted: children and family life, genetic continuity, the experience of conception, pregnancy and birth, the meaning of your life plan and marriage, and your sexuality.

The following are examples of common feelings experienced by many women dealing with infertility:

Confusion

“I simply assumed I was fertile. I took birth control for years to avoid pregnancy, and it seems very ironic that I can’t conceive now. And I don’t know why I can’t. I feel very confused about the whole situation, and it’s hard to make sense of it all.”

Frustration

“I learned about my infertility only after trying to become pregnant for some time. Now my life seems on hold, and a lot of my time is spent on medical appointments, tests, and treatments. Sometimes I feel frustrated and powerless.”

Fear

“For me, going through infertility brought up a lot of fears and questions. How long would it last? What if I never became a parent? Why didn’t my body do the things I wanted it to do? I was afraid of my feelings, afraid of my body and afraid of the future.”

Isolation

“I felt like I was the only woman I knew who was going through it. I stayed away from my friends because seeing their children hurt me terribly. I felt very alone, like no one understood me.”

Guilt and shame

“I couldn’t accept that it was a medical problem. I began to blame myself, and wondered why I was being punished. I couldn’t figure out what I’d done to deserve infertility. My self-esteem was at rock bottom and I felt like a failure. I began to worry about what my family would think, and if my husband would stay with me if we couldn’t get pregnant.”

Anger

“Everything makes me angry these days. My body, my partner, my family and friends. I get very upset when I hear about child neglect or abuse, because why should those people have children if they aren’t capable of loving them? I also get angry when I have to listen to well-intentioned advice. Hearing comments like ‘you’re not trying hard enough’ or ‘you should consider adoption’ just send me into a rage.”

Sadness and hopelessness

“I feel like my future is hanging in the balance, and that I can’t hope for anything. I’m sad about the strain that infertility puts on my marriage and career. And I’m very sad that I’ve had to put my life on hold while I try to get pregnant. I hate not having any definite answers or guarantees.”

Dealing with infertility as a couple

Infertility can bring many changes to your relationship as a couple. It may bond you closer together, as mutual support and understanding leads to greater sharing and intimacy. But it can also bring forth feelings of guilt and resentment, particularly if no resolution is in sight. As a couple, you may have a lot of feelings in common when dealing with infertility, such as feeling out of control of your lives and your emotions.

Loss of control

You and your partner have probably planned your lives to begin a family at the most favorable time. You may have practiced birth control for years and waited until your careers were established before trying to conceive. A diagnosis of infertility can remove the feeling of control over your life together.

Expressing feelings—the differences

You and your partner are also affected by infertility in different ways, related to how men and women have been socialised to think, feel and act.

As a woman, you may feel responsible for much of the burden of infertility in a way that your husband may not. As a result, you can experience negative feelings, such as pain, anger, and fear, which can lead to anxiety and depression. These feelings are very common, and often the resulting friction can cause problems in your relationship.

Men, however, often feel more threatened expressing themselves since they’ve often been taught to repress their emotions. They are trained to take charge, to make decisions, and to think without being emotional. They tend to focus their energy

on their work, a place where they feel they can have more control. Some men also confess feeling overwhelmed by the intensity of their partner's emotions, making it hard for them to offer support.

You may both feel that no one else understands what you are going through, and may isolate yourselves from potential sources of support such as friends and other family members.

A stronger relationship

Infertility can test your relationship in a variety of ways, but providing mutual emotional support and working together can reduce some of the stress and help to avoid creating distance. It may even strengthen your relationship, as you both learn to give reassurance and encouragement, and realise that you can really depend on each other.



Sexuality

Failure to conceive affects both self-esteem and self-worth. And this negativity is sometimes reflected in a couple's sexuality, which can be compounded by it being seen as the "source" of the infertility problem. After all, most people see fertility as a logical consequence of a couple's sexuality.



As time passes, you may find that sex loses its pleasurable aspects and feels like something of a chore. You and your partner may become aware of a loss of spontaneity, as medical procedures, temperature charts, and sex on a schedule can combine to take the joy out of your sex

life. You may lose sight of each other and what brought you together as a couple.

These feelings can affect your sex life, but it is important to remember that you can help each other through the difficult times. Do things together outside of the bedroom, and try to keep life in perspective. Share your feelings with each other. Remember that your life together as a couple is rich and varied, and is not defined solely by your ability to conceive.

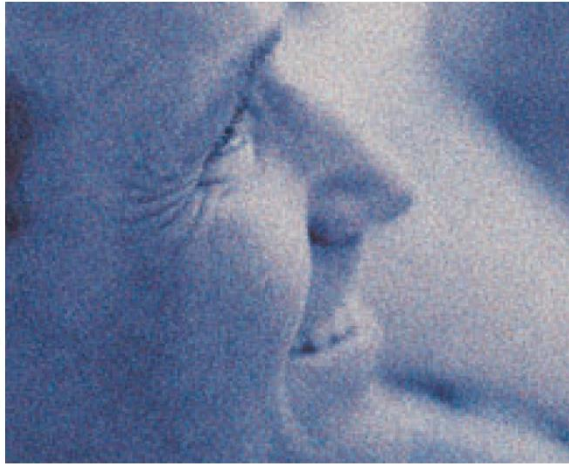
Infertility and your relationship

Infertility can have a significant impact on your relationship. It affects both partners physically, psychologically, socially and economically. Couples often report a wide range of emotions, including:

- Anger at infertility for taking over their lives
- Anger at the inequity of infertility treatments. In most cases, women carry more of the burden than men do
- Frustration over treatments that don't guarantee a baby, after spending a great deal of time and emotional energy
- Desire to fight back and gain control of the process
- A heightened sense of sensitivity and vulnerability
- The feeling that sexual intercourse is drudgery
- Frustration at the inability to make short- and long-term plans
- Self-punishment—"Perhaps I don't deserve to have a child"
- Blame—"If only we'd done this or that, then we'd have a baby"

How your partner can help

Your partner cares about you and how infertility is affecting your relationship. Your partner wants to help you in any way possible, and this section is intended to help both of you.



What you as a partner can do: Infertility is a couple's problem and is best approached as a team, through the commitment of both partners. Here are some ways in which you can support your partner during this difficult time.

Be a listener. Ask her if she needs to talk. Let her know you are available for her. While listening, try to maintain an open mind and be supportive. Remind her that you love her no matter what. If she needs additional support such as counselling, accompany her to appointments and attend counselling yourself if need be.

Be sensitive. Don't try to pretend that everything will be OK. Don't trivialise her feelings, or give her empty reassurances.

Be patient. Remember that working through infertility is a process that takes time. There are no guarantees, no package deals, no one right answer, and no quick choices. Your partner also needs patience as her feelings change. Don't minimise or evaluate her feelings. Just allow her to have them, and give her time.

Stay informed. This will help you maintain perspective about the array of choices you must make as a couple. The more information you have, the more knowledgeable decisions you can both make about your options.

Do things as a couple. Enjoyable experiences with you such as a lunch date, a shopping trip or a visit to a museum help her feel that there is a life outside of infertility.

Remember that your willingness to listen and support can go a long way towards helping her handle the stress she's experiencing. Infertility is probably one of the most difficult situations you will ever have to deal with.

Managing infertility: What you need to know about infertility treatment

Starting out

If you suspect a problem with your fertility, the best thing you can do is to take immediate action. The earlier a problem is identified, the sooner your physician can recommend the treatment program that is right for you. Responding to early concerns about infertility can increase your chances for a successful outcome.

When should I seek treatment for infertility?

Treatment starts as soon as you seek professional help. Many infertile couples undergo a long process to attempt to conceive with no guarantees of success. On the other hand, there are women who become pregnant soon after their first appointment with the fertility specialist, without any treatment at all.

Should my partner accompany me to the specialist?

It takes two people to make a baby. Since both you and your partner are involved in the process, it is only fair that he be part of it. The infertility specialist will be able to discuss with both of you the different options that you have and to also outline the chances of success and the possibility of failure.

What is the success rate of infertile couples getting pregnant with treatment?

Over half of the couples with more than two years of infertility eventually become successful in achieving pregnancy. With advances in infertility research and wider availability of newer techniques, the success rate of infertility treatment is increasing all the time.

Infertility treatments and procedures

Over the past decade or so, improvements in techniques and procedures in reproductive medicine have increased the variety and availability of procedures to assist couples in achieving pregnancy. The treatment recommended for you will depend on your particular diagnosis and your decision on which direction your treatment will take.

Treatment may include timing of intercourse, hormone therapy, intra uterine insemination (IUI) to bypass problems with sperm/cervical mucous interactions, in vitro fertilisation (IVF-ET) with embryo transfer, gamete intra fallopian transfer (GIFT), or intra cytoplasmic sperm injection (ICSI).

During the course of your evaluation, various testing procedures to determine male partner status, uterine/ovarian status, and tubal status will provide your doctor with information to recommend treatment options for you. Often your doctor will decide on a less invasive treatment plan at first, such as timed intercourse or IUI. However, if the treatment does not result in pregnancy after several cycles, your doctor will likely recommend another treatment, such as IVF or ICSI.

Whatever the ultimate treatment plan, the ultimate decision remains with you, your partner and your doctor. Read on for more information about treatments and procedures to begin your education process.

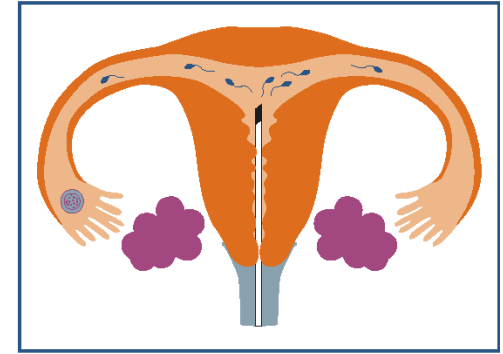
Timed intercourse

This is the most basic treatment for infertility. If testing determines normal tubal patency, follicular development, endometrial development, and semen analysis, you can attempt pregnancy through timed intercourse. This procedure may include using a urine surge test kit to determine the time of ovulation upon which you and your partner will have intercourse at a given time. This is done to ensure that the sperm is in the fallopian tube at the time the egg is released and begins to travel down the tube.

A more advanced form of this treatment may include a monitoring ultrasound to determine follicular development and the development of the uterine lining (*see ill. 2*). A trigger shot of Human Chorionic Gonadotropin (hCG) can be given to induce ovulation and set up the timing for intercourse.

Intra-Uterine Insemination (IUI)

This procedure, also known as “artificial insemination”, involves placing washed sperm into the uterus with a small catheter through the cervix. Sperm can be from the partner or from frozen donor sperm, depending upon your needs. IUI is often performed if you have had failed attempts at timed intercourse or if there is a determination of abnormal cervical mucous/sperm interaction, poor mucous, or hostile mucous which renders the sperm unviable. In the latter case, sperm are injected past the cervical barrier to enable them to move into the fallopian tube and reach the egg (*see ill. 1*). Variations in the procedure include taking medications to produce multiple follicles and the release of more than one egg in order to achieve fertilisation.



ill. 1

Advantages of IUI

- Minimally invasive
- Less emotional commitment
- Less time-consuming

Disadvantages of IUI compared to IVF-ET and ICSI

- Fertilisation cannot be confirmed
- Risk of multiple pregnancy
- Tubes must be unobstructed

In Vitro Fertilisation-Embryo Transfer (IVF-ET)

IVF-ET is probably the most commonly used of the Assisted Reproductive Technologies (ART). It is often known as the “test tube baby” procedure and has helped infertile couples conceive and bear children for well over two decades.

In order for a pregnancy to occur, an egg must be released from the ovary and unite with a sperm. This union, called fertilisation, normally occurs within the fallopian tube. During the process of IVF, however, this union takes place in a laboratory after both eggs and sperm have been collected. The fertilised eggs are then transferred to the uterus to continue growth.

Down-regulation

Medication is given which temporarily switches off the messages going from the brain to the ovaries telling them to produce an egg on a monthly basis.

In addition, down regulation prevents premature release of the egg. Thus, down regulation primarily serves to ensure correct timing of ovulation prior to egg collection.

To ensure that the medication has worked, a blood sample is taken to check the level of oestradiol (one of the oestrogen hormones) and sometimes by performing an ultrasound scan of the ovaries and womb (uterus).

Ovarian stimulation and follicles monitoring

Gonadotropins (e.g. hMG) are given to stimulate the ovaries into producing the follicles, which contain the eggs. HMG contains equal parts of FSH (Follicle Stimulating Hormone) and LH (Lutenizing Hormone). Both hormones are natural parts of the follicle stimulating process. Treatment with hMG lasts 1 to 2 weeks and involves a once-daily subcutaneous injection. Your doctor or nurse will teach you how to give the injections yourself. The length of treat-

ment will depend on how your ovaries respond; ovary response will be monitored with the use of ultrasound (*see ill. 2*) and a blood test that measures your estrogen levels. Once ultrasound shows that the lead follicle has matured in size, hCG (human Chorionic Gonadotropin) will be injected to trigger the release of the egg.

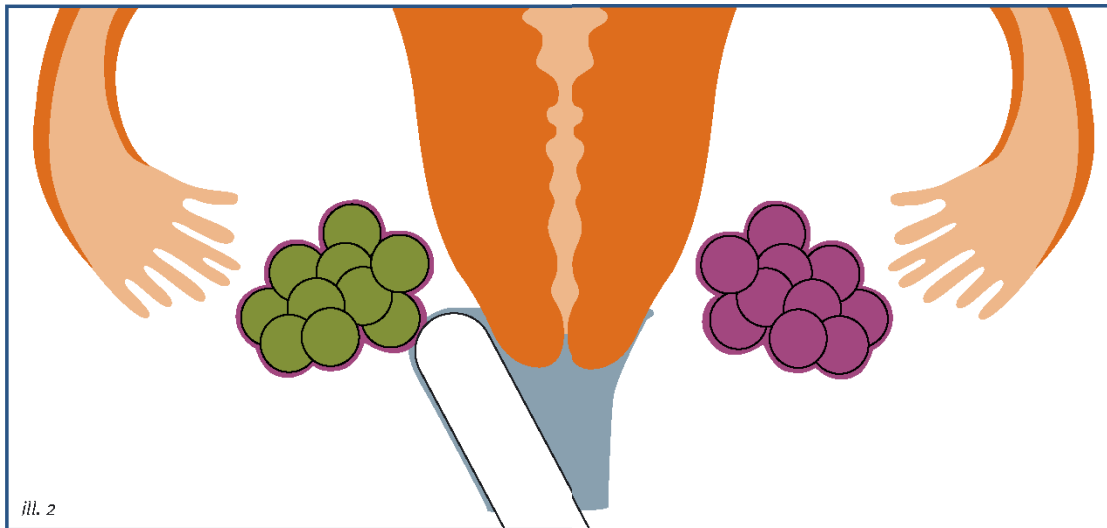
Egg retrieval and embryo observation

Thirty-six hours after the trigger shot, retrieval of the eggs is undertaken. The procedure itself is performed at the hospital/clinic most often by a transvaginal route. A needle, guided by ultrasound imaging, is inserted through the vaginal wall into the ovaries, where the follicles containing the eggs are punctured and withdrawn. The released eggs are transferred to the lab where their developmental stage is assessed. Anesthesia is usually not used for this simple procedure. The procedure takes about 10-15 minutes, and you can return home a few hours after it.

A sperm specimen is then washed and prepared for insemination. Each egg is placed in a dish and a defined number of sperm cells is added. Each dish is placed in an incubator. The embryos are then observed for a few days for normal fertilisation under a microscope.

Embryo transfer

If fertilisation is successful, the embryos can then be transferred to the uterus. The transfer technique is accomplished by placing 1-4 embryos inside a narrow plastic tube (transfer catheter) which is then inserted into the uterus through the cervix. The process lasts only a few minutes. You may then rest for a couple of hours, and return home where you often are advised to take it easy for 1 or 2 days.



Luteal phase support

In some cases, supplemental progesterone is occasionally used to improve the secretion of progesterone and estrogen during the luteal phase. It is administered in different ways to support the luteal phase. Luteal support is administered to improve chances of implantation.

Pregnancy test and ultrasound

A blood or urine pregnancy test will be taken. If the test is positive, an ultrasound examination will be arranged within the next two to four weeks. Once ultrasound confirms the presence of a healthy pregnancy, your doctor will discuss plans for pregnancy care with you.

Cases in which IVF may be recommended

- Tubal disease
- Endometriosis
- Cervical problems
- “Unexplained” infertility
- Failure of IUI

Advantages of IVF

- Fertilisation is confirmed
- Successful treatment in most infertility cases

Disadvantages of IVF

- Technically demanding
- Risk of multiple pregnancy
- Price / costs

The IVF—process at a glance

There are several major steps to the in vitro fertilisation (IVF) process. All of these are done on an outpatient basis:

- Downregulation of the pituitary, depending on which IVF protocol is used
- Stimulation and monitoring of the follicles
- Collection of the eggs
- Collection and preparation of the sperm sample
- Incubation of the egg(s) and sperm together in the laboratory, to allow for fertilisation and early embryo development
- Transfer of the embryo(s) into the uterus
- A two-week wait for a pregnancy test

Intra-Cytoplasmic Sperm Injection (ICSI)

ICSI is a type of assisted microsurgical fertilisation that involves the injection of a single sperm directly into an egg. Over the last few years, various methods of assisted microsurgical fertilisation (micromanipulation procedures) have been developed for use when the male partner exhibits poor sperm motility and/or low sperm count. ICSI allows a much higher fertilisation rate for these patients with “normal” fertilisation in over 50% of the eggs. Eggs for ICSI are obtained in exactly the same way as those for IVF. Following egg retrieval, the cells surrounding

each egg are carefully removed. The eggs are then examined under a microscope and only those that are judged as mature are suitable for injection. Typically, 70% of the eggs that are obtained are suitable for ICSI. The sperm are washed and prepared. The egg and the sperm are then placed on a special microscope that has micromanipulators attached to it. One micromanipulator holds the egg in place, while the other is used to inject the sperm into the egg. The remainder of the procedure is similar to standard IVF with regard to incubation of the eggs and transfer of the resulting embryos.

Cases in which ICSI may be recommended

- Very low numbers of motile sperm with normal appearance
- Problems with sperm binding to and penetrating the egg
- Antisperm antibodies (immune or protective proteins which attack and destroy sperm) of sufficient quality to prevent fertilisation
- Prior fertilisation failure with standard IVF culture and fertilisation methods
- Absence of sperm in the seminal fluid

Advantages of ICSI

- Most effective procedure for male infertility
- Overcomes some sperm quality problems

Disadvantages of ICSI

- Possibility of transmitting infertility to offspring
- Technically demanding
- Price / costs

Gamete Intra-Fallopian Transfer (GIFT)

This form of assisted reproduction technique involves the same first and second step as in vitro fertilisation, namely superovulation and monitoring follicular and endometrial growth.

The eggs are retrieved (normally transvaginally with local anaesthesia), again by ultrasound-guided-aspiration of the follicles on the ovaries. A previously washed and prepared sperm specimen is obtained. The eggs and sperm are then placed together in a catheter. Normally two eggs in each tube are transferred.

In step four, a laparoscopy is performed on the patient and a small camera is placed just under the navel into the pelvic area. The fallopian tube is then grasped using special instruments and the catheter containing the eggs and sperm are threaded into the fallopian tube (*see ill. 3*). The eggs and sperm are then injected into the fallopian tube.

The idea is to bypass physical barriers to normal egg and sperm transport due to adhesions, endometriosis, and immunological problems. Although the process places the egg and sperm in close proximity that enhances the chance of collision, it does not guarantee fertilisation. Eggs in excess can be taken back to the lab for IVF and possible embryo freezing for future use. This may help to determine if normal fertilisation can take place. In cases of questionable sperm motility or fusion, achieving fertilisation in the lab may be preferable.

Cases in which GIFT may be recommended

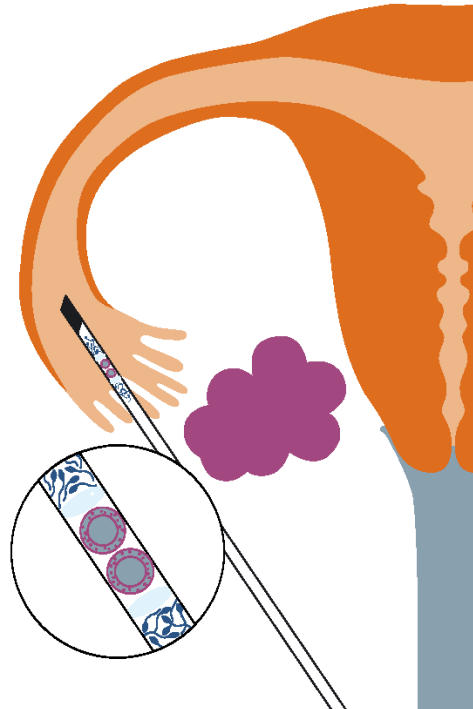
- Endometriosis with patent tubes
- Cervical mucus hostility/dysfunction
- Failure of IUI

Advantages of GIFT

- Natural environment for fertilisation
- Less technically demanding

Disadvantages of GIFT

- Fertilisation not confirmed
- Tubes must be unobstructed
- General anaesthesia
- Price / costs



ill. 3

Awaiting the outcome

Fertility treatment can bring with it a certain degree of emotional strain. The process is emotionally and physically demanding, often seems outside your control, and has no guarantee of a successful outcome—all of which can increase your stress level. While most couples cope well with the stresses of the IVF procedure, all couples will feel the pressures to some extent.

Taking control

There is no escaping the stress of fertility treatment, but there are ways in which you can manage or reduce the stress and regain a sense of control over your life. Try these strategies to help you cope with the demands of fertility treatment:

- Approach the infertility problem together with your partner as you would with any new project. Your doctor can help the both of you map out a strategy and a timetable.
- Collect information on the Internet. There are many useful Web sites dealing with the subject of infertility.
- Try to keep the lines of communication open with your partner. This may not always be easy, but you need to support each other and communication is vital.
- Don't be afraid to talk to others who have undergone fertility treatment. Their experiences will help you know you are not alone. Keep in mind, however, that everyone is unique and your situation is not exactly like anyone else's.
- Don't dwell on the short-term ups and downs of treatment. It is perfectly normal to feel frustrated and angry when things aren't going as you planned.
- Allow yourself to feel down when you have

reached your limit. Remember that you are okay although you're having trouble conceiving a baby.

- Consider taking time off from treatment if it becomes overwhelming.
- Make a date to have sex for fun during the “nonfertile” times of the cycle. Try to bring back your original closeness.
- Try to redirect your focus toward something positive, such as a favourite hobby or new activity.
- Seek emotional support from a counselor or support group.

The result—before and after

In particular, you can expect your and your partner's stress levels to rise during the periods of waiting, for confirmation that fertilisation has occurred and for a positive pregnancy test:

“You are sort of on a knife edge. You go into hospital and have the eggs taken out and then the sperm's mixed and you feel you have to wait forever. You are so nervous and just hope for the best.”

“The hardest part of all has been the ups and downs. You go from the very heights to the bottom with just one phone call.”

For many women, a negative result can mean intense disappointment: “When I had a negative test no one could have prepared me for how devastated I was going to feel. I just screamed and cried and was desperately upset, and I wasn't prepared that I was going to be that upset.”

“It was worse with IVF, knowing that you'd had 3 embryos put back. It doesn't hit you straight away. No one who hasn't been through this can understand what it feels like. We've both lost people close to us, but this is a different type of grieving, you've got nothing to remember what you are grieving for and it's devastating.”

These experiences are in stark contrast to the elation felt by women who achieve pregnancy:

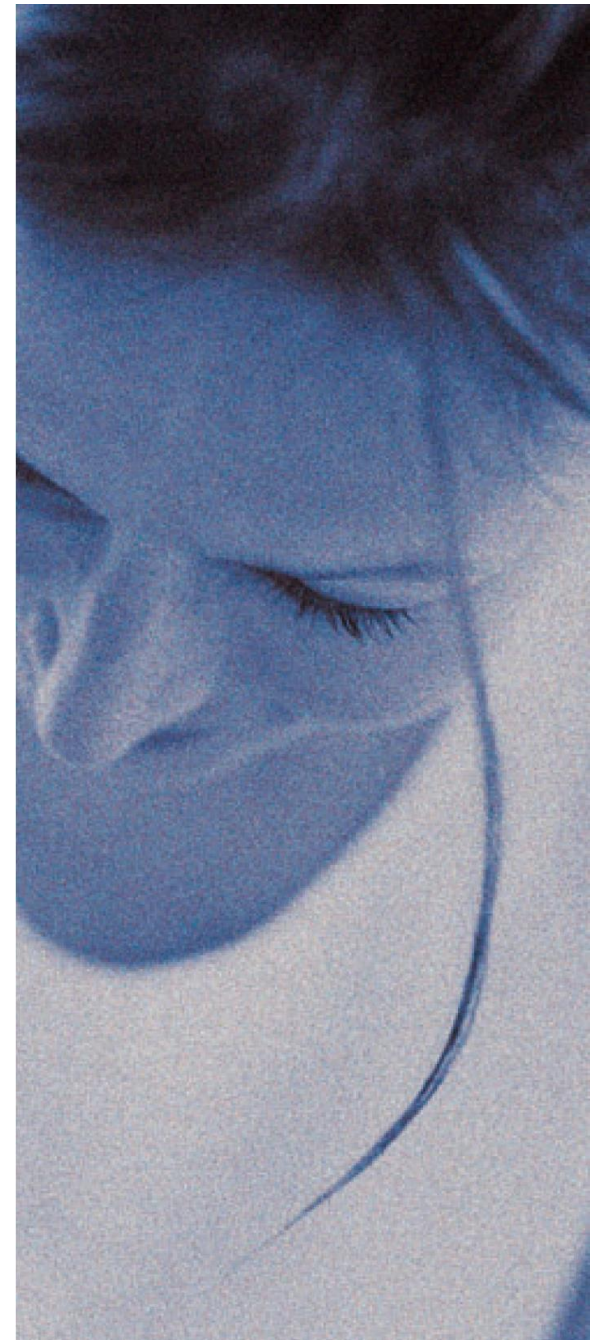
“I don't think that until a few months ago it dawned on me that I'd actually got the healthy children that I wanted.”

“I can't believe it still—after this length of time. I can't believe that I've got a baby, and neither can my husband.”

Stay positive

Although going through treatment can be very hard on you, it is important to remember that there is always hope, and success may be achieved after considerable effort. Even in normal fertile couples, there is no guarantee of conceiving right away. It may take time and repeated efforts. Remember that a successful resolution may be just around the corner for you, too. This can make it all worthwhile.

In the next section of this booklet, you will find a range of tips and ideas for helping you and your partner cope in this difficult time.



Finding ways to cope

Infertility is an experience that continually fluctuates in intensity, so that at different times you may have different needs and experience different emotions. You must find your own ways of coping with the situation, and the following section provides a range of ideas on how you can take care of yourself and your partner during this difficult time.

Realise that infertility is a life crisis

Infertility may be one of the hardest situations you'll ever face. It can call into question the most fundamental expectations you have for yourself, your body, and your relationship. It's normal to feel a sense of loss, to feel stressed, depressed, or overwhelmed.

Educate yourself

Read as much as you can and don't be afraid to ask questions. This is particularly important when dealing with infertility because the technology is complex and changes so quickly. Talking with your doctor and understanding your options enables you to make informed choices.

Don't blame yourself

Negative thoughts only make things seem worse. When you start feeling like you "should have" or "could have," try to remind yourself that infertility is not your fault. Concentrate on the present and the future, and how you and your partner are going to manage the current situation.

Maintain your emotional partnership

Couples often feel like adversaries during this

time. Do your best not to place blame, and instead try to help each other. This doesn't mean you need to feel exactly the same way at the same time (most experts say couples are often out of sync), but it does mean sympathizing with your partner's situation. If you're taking care of each other emotionally, you can unite to fight the problem.

Decline invitations to baby-focused activities

If certain gatherings or celebrations (such as christenings) are too painful, give yourself permission to avoid them. Your friends and family will understand.

Get support

Society often fails to recognise the grief caused by infertility, which leads those struggling with infertility to hide their feelings. This only increases feelings of shame and isolation. Finding others who are going through the same thing can help you see that you are not alone and that your feelings are reasonable. Openly discussing your emotions can relieve tension, and can sometimes contribute to a higher pregnancy rate.

Consider counselling

If you and your partner feel strained and isolated from one another, you may want to consider counselling. This has proven a very successful resource for many couples, and you may find it helps you share a new level of mutual respect and understanding. The ability to get through this together can open new doors to the future and deepen your relationship in a variety of ways.

Keep your perspective

When it comes to fertility treatment, there are no guarantees. Trying to stay realistic can help you make smarter choices as you work your way through the emotional minefield of fertility treatment.

Pursue other interests

Although you may feel like being treated for infertility is a full-time job, it's important to participate in some of the activities or hobbies that bring you pleasure. If you find that your old activities are painful—maybe all your friends are parents now—look for new diversions.

Setting limits, taking breaks

Only you and your partner can decide your limits. Here are some questions you might want to ask yourself if you feel that treatment is too stressful, or if you may need to take a break from treatment:

- Do you feel that you are just going through the motions of treatment?
- Do you feel that you would have no regrets if you stopped treatment today?
- Have you and your partner drifted apart because of the infertility problem?
- Have you lost touch with yourself and your goals?
- Are you comfortable with other options available to you?

Often, taking a pause from fertility treatment can provide a release of tension and some needed perspective. Some couples even find that they achieve pregnancy at this point. Discuss it with your doctor, and consider whether taking a break is right for you.

Easing stress

Here are some coping strategies that can help you through this trying time

- Read and learn as much as you can about infertility
- Communicate fears and emotions to your partner on a regular basis
- Support one another, but understand that at times it will be difficult to do this
- Acknowledge the fact that periods of depression and anxiety may happen
- Try to eliminate stressful activities
- Allow yourself private time
- Share your problem with supportive friends or other family members
- Go to doctor appointments together so you both understand the tests and procedures
- Write all of your questions down prior to your appointments so you don't forget to ask your doctor to address each of your concerns.
- Take care of yourself by pursuing other interests
- Discuss limits with your partner: How long will you try?

Glossary

Here is an alphabetical list of terms and abbreviations you might encounter during treatment for infertility.

ART (assisted reproductive technology): All treatments or procedures that involve the handling of human eggs and sperm for the purpose of establishing a pregnancy. Types of ART include IUI, IVF, GIFT, ZIFT, embryo cryopreservation, egg or embryo donation, and surrogate birth.

ART cycle: A process in which an ART procedure is carried out, a woman has undergone ovarian stimulation or monitoring with the intent of having an ART procedure, or in the case of frozen embryos, embryos have been thawed with the intent of transferring them to a woman. A cycle starts when a woman begins taking fertility drugs or starts ovarian monitoring.

Donor embryo: An embryo formed from the egg of a woman who has donated it for transfer to a woman who is unable to conceive with her own eggs (the recipient).

Egg: A female reproductive cell—also called an oocyte or ovum.

Egg retrieval (also called oocyte retrieval): A procedure to collect the eggs contained in the ovarian follicles.

Egg transfer (also called oocyte transfer): The transfer of retrieved eggs into a woman's fallopian tubes through laparoscopy. This procedure is used only in GIFT (see definition).

Embryo: An egg that has been fertilised by a sperm and that has undergone one or more divisions.

Embryo transfer: Placement of embryos into a woman's uterus through the cervix after IVF (see definition) or, in the case of ZIFT (see definition), into her fallopian tubes.

Endometriosis: The presence of tissue similar to the uterine lining in locations outside the uterus, such as the ovaries, fallopian tubes, and abdominal cavity.

Fertilisation: The penetration of the egg by the sperm and the resulting fusion of genetic material that develops into an embryo.

Follicle: A structure in the ovaries that contains an egg.

Fresh eggs, sperm, or embryos: Eggs, sperm, or embryos that have not been frozen. However, fresh embryos may have been conceived using either fresh or frozen sperm.

Gamete: A reproductive cell, either a sperm or an egg.

GIFT (gamete intrafallopian transfer): An ART procedure that involves removing eggs from the woman's ovary, combining them with sperm, and using a laparoscope to place the unfertilised eggs and the sperm into the woman's fallopian tubes through a small incision in her abdomen.

ICSI (intra-cytoplasmic sperm injection): A procedure in which a single sperm is injected directly into an egg. This procedure is most commonly used to overcome male infertility problems.

IVF (in vitro fertilisation): An ART procedure that involves removing eggs from a woman's ovaries and fertilising them in the laboratory. The resulting embryos are then transferred into the woman's uterus through the cervix.

Laparoscopy: A surgical procedure in which a fiberoptic instrument (a laparoscope) is inserted into the pelvic area through a small incision in the abdomen.

Live birth: Any infant delivered with signs of life after 28 or more weeks of gestation.

Multifetal pregnancy reduction: A procedure in which the number of gestational sacs is reduced. This procedure is used to decrease the number of fetuses a woman carries and thereby improve the chances that the remaining fetuses will survive and develop into healthy infants.

Multiple birth: A pregnancy that results in the birth of more than one infant.

Oocyte: The female reproductive cell—also called an egg or ovum.

Ovarian monitoring: The use of ultrasound and/or blood or urine tests to monitor the development of ovarian follicles.

Ovarian stimulation: The use of drugs to stimulate the ovaries to develop follicles and eggs.

Pre-embryo: A fertilized egg in the early stage of development prior to cell division.

Pregnancy, Chemical: Pregnancy documented by a blood or urine test that shows a rise in the level of the human chorionic gonadotropin (hCG) hormone.

Pregnancy, Clinical: Pregnancy documented by the presence of a gestational sac on ultrasound.

Pregnancy test: A blood or urine test that determines the level of the human chorionic gonadotropin (hCG) hormone. Elevated levels of this hormone are chemical evidence of a pregnancy.

Sperm: The male reproductive cell.

Spontaneous abortion (miscarriage): A pregnancy ending in the spontaneous loss of the embryo or fetus before 28 weeks of gestation.

Stillbirth: An infant delivered without signs of life after 28 or more weeks of gestation.

Stimulated cycle: An ART cycle in which a woman receives drugs to stimulate her ovaries to produce more follicles.

"Swim-up" technique: A technique which selects and concentrates sperm that are most capable of fertilising the egg.

Tubal factor: A cause of infertility related to structural or functional damage to one or both fallopian tubes.

Ultrasound: High frequency sound waves. A noninvasive technique for visualising the follicles in the ovaries and the gestational sac or fetus in the uterus. Can be performed either transabdominal or transvaginal.

Unexplained cause of infertility: Infertility for which no cause has been determined despite a comprehensive evaluation.

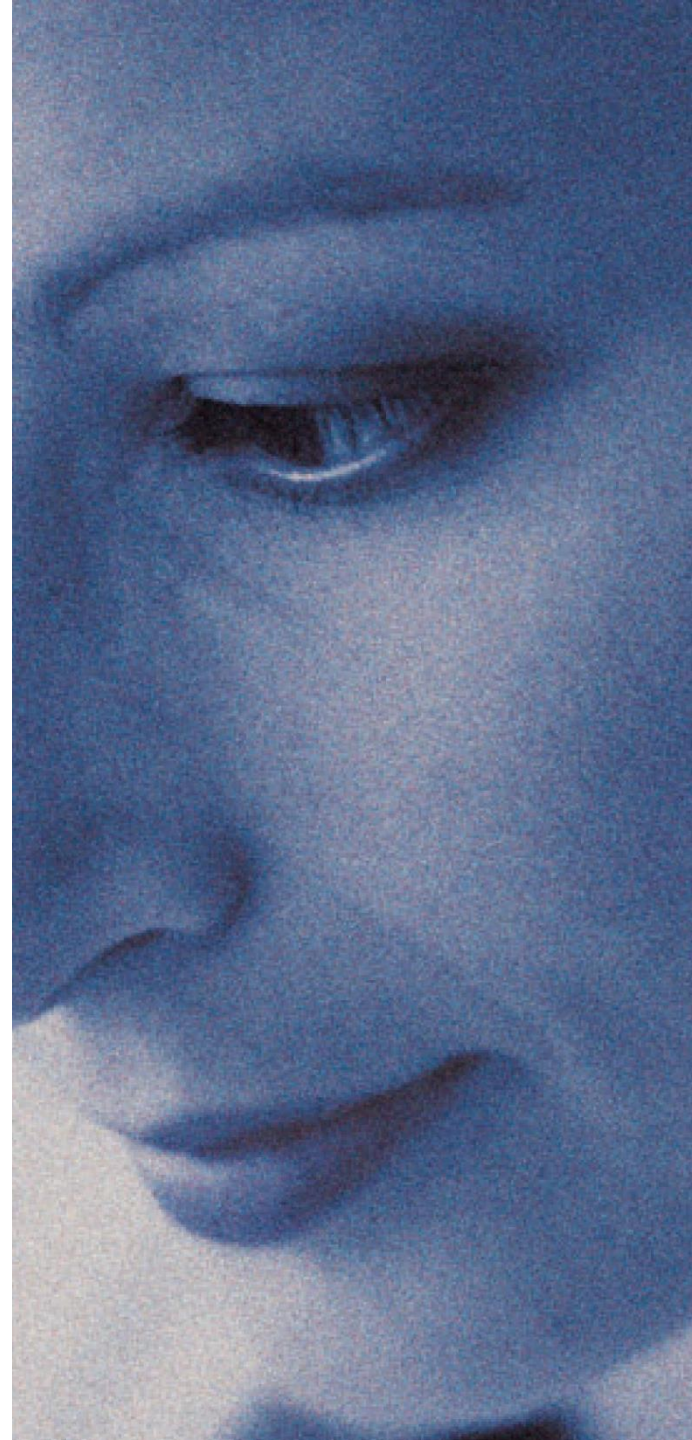
Unstimulated cycle: An ART cycle in which the woman does not receive drugs to stimulate her ovaries to produce more follicles. Instead, follicles develop naturally.

Uterine factor: A cause of infertility related to defects in the uterus.

Washed sperm: Sperm which is washed to reduce the risk of infection (because the cervical mucus is by-passed).

ZIFT (zygote intrafallopian transfer): An ART procedure in which eggs are collected from a woman's ovary and fertilised in the laboratory. A laparoscope is then used to place the resulting zygote (fertilised egg) into the woman's fallopian tubes through a small incision in her abdomen.

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**GROWING AND
SELECTING THE**

SELECTING THE BEST EMBRYO WITH EMBRYOSCOPE



If you're having trouble becoming pregnant, in vitro fertilisation (IVF) may be right for you. IVF is used



Boosting the egg supply



Egg collection



Egg meets sperm, Fertilisation



Growing and selecting the best embryo



Transfer to the womb



The 'two week wait'

to treat a range of fertility problems. An IVF cycle involves several different steps that will help you increase the chances of becoming pregnant. One of the steps is growing the embryos in a safe undisturbed environment and selecting the embryo most likely to result in the birth of a healthy baby.

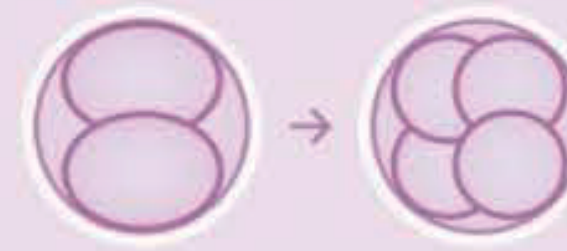
**MONITORING YOUR
EMBRYOS WHILE THEY**

EMBRYOS WHILE THEY GROW

After egg collection and successful fertilisation of your eggs you may have more than one embryo available. Those eggs that have been successfully fertilised (now called embryos) will be grown in the laboratory incubator for 2 to 5 days. Your embryologist will monitor their development and the best embryo will then be chosen for transfer.



n for 2 to 5 days



Embryo development is monitored to select the best quality embryo for transfer.

LET YOUR EMBRYOS GROW IN AN UNDISTURBED

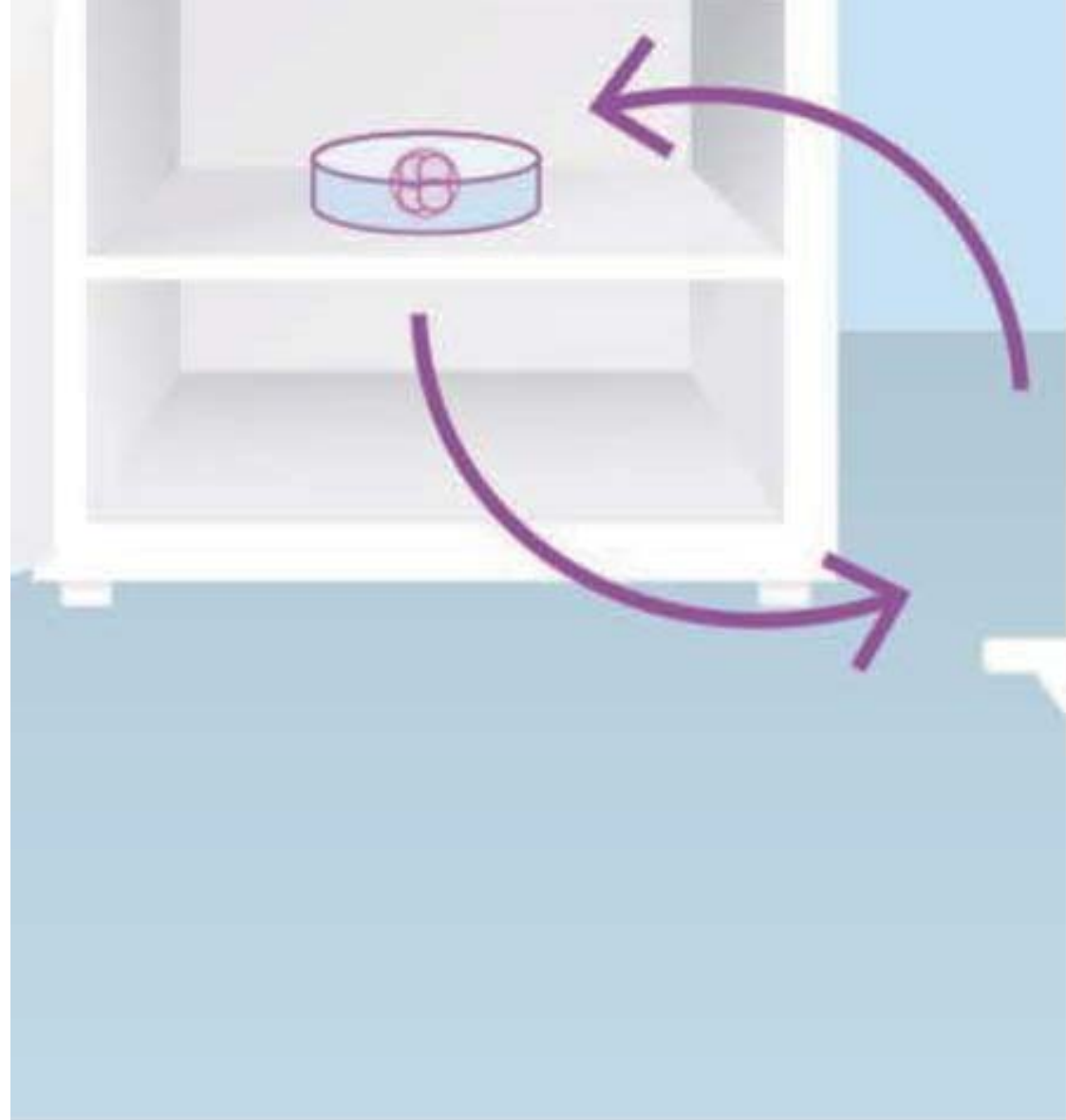
ENVIRONMENT

The embryo transfer may take place after two to three days, when the embryo(s) have reached what is called the 'cleavage stage', or when it has reached the blastocyst stage, usually 5-6 days after fertilisation. Not all embryos are capable of leading to a pregnancy. Embryos vary in quality and the better the quality, the more likely an embryo is to implant in the womb and lead to a pregnancy.



The traditional way

Currently, embryologists must remove the embryo from the incubator to perform three to five brief evaluations of the developing embryo, at fixed time-



points over 2 to 5 days, in order to check different criteria for selecting the best embryo. Such as the number of cells and how fast they are dividing.

The evaluation time allowed for these 'snap-shot' evaluations is limited by the need to minimise the time embryos spend outside of the safe environment of the incubator. This is to avoid embryo stress which can reduce the quality of the embryo and therefore the chances of pregnancy.

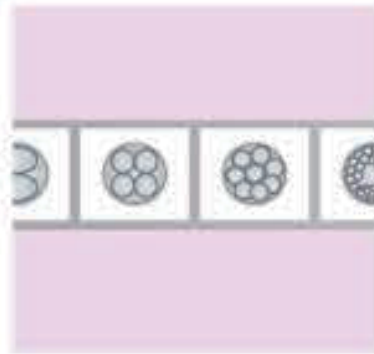
The new way

But with time-lapse technology, embryologists are able to monitor your embryos through the full course of their development without removing them from the safe environment of the incubator.

course of their development without removing them from the safe environment of the incubator.



The specially designed EmbryoScope incubator with a built in camera and microscope takes an image of your embryos every 10 minutes.



As a result, time-lapse videos of individual embryos are generated over the 2 to 5 days they remain in the incubator.



Your embryologist uses advanced software to look at the time-lapse movies of your embryos to select the best ones for transfer and freezing.

KEEPING YOUR

EMBRYOS SAFE

With time-lapse your embryos remain protected in the EmbryoScope incubator and stay undisturbed in their stable and warm environment for the entire culture duration.



**SELECTING THE EMBRYO
WITH THE HIGHEST**

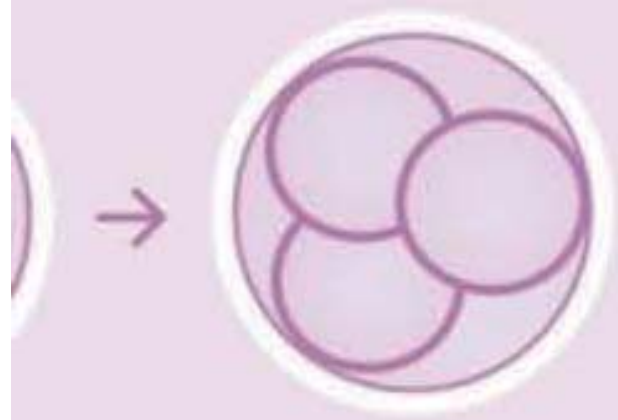


WITH THE HIGHEST CHANCE

Observing features of early embryo development is important for when IVF professionals evaluate the embryo's potential to implant and become a successful pregnancy. The traditional 'snap-shot' evaluations have been reported to miss critical embryo development patterns, but with EmbryoScope your embryologist does not miss a thing.



Traditional 'snap-shot' evaluations



Normal cleavage patterns
Up to 26%



Abnormal cleavage patterns
More than 70%

Traditional snap-shot evaluations miss critical development patterns

Traditional evaluation is likely to miss abnormal cleavage patterns. One abnormal cleavage pattern is direct cleavage which has been shown to occur in up to 26% of embryos and to reduce chances of implantation after transfer.^{1,2} This is when your embryos divide directly from 1 to 3 cells instead of dividing normally from 1 to 2 to 4 to 8. Another abnormal cleavage pattern is when embryos go from a higher to a lower cell number.

Traditional evaluation misses more than 70% of embryos that have an abnormal number of nuclei. An abnormal number of nuclei has been shown to result in lower implantation rates.^{3,4}

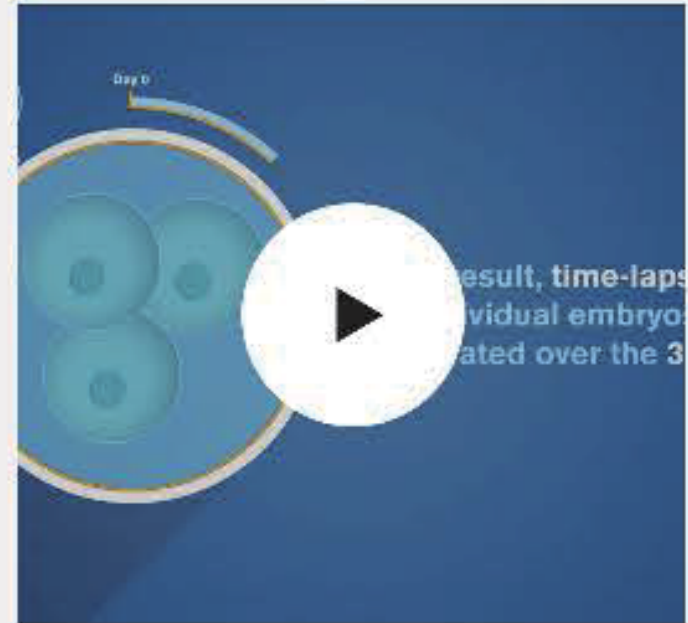
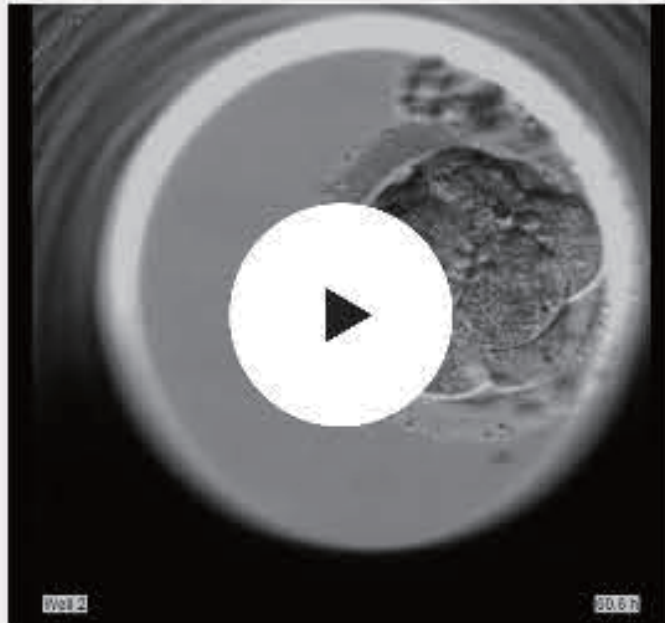
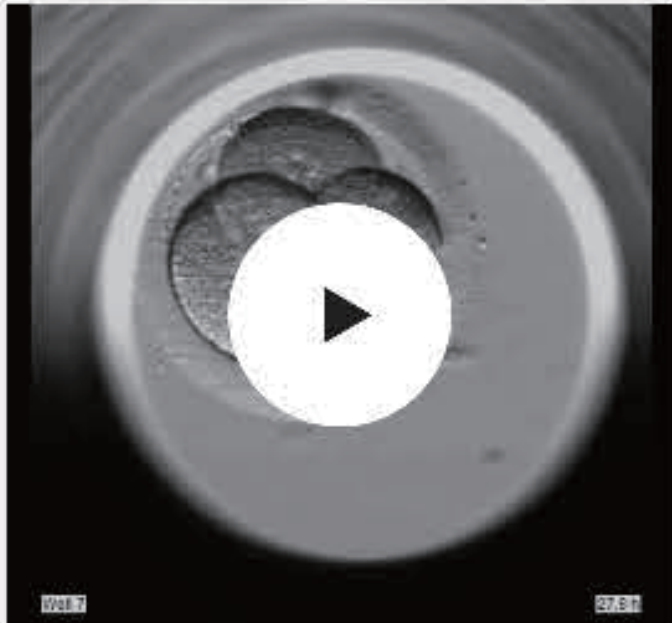
The best information possible

With time-lapse videos gained from using EmbryoScope your embryologist has the best information possible about the entire embryo development history to decide which embryos to transfer or freeze for future use.

Advanced software support



EmbryoScope has software tools that help embryologists make the best choice. Information which has been gathered from thousands of IVF cycles performed worldwide can be used to identify development patterns which are most likely to have a successful result.



Embryo development with direct cleavage

This is an example of an embryo with an abnormal cleavage pattern. The embryo cleaves directly from 1 to 3 cells.

Embryo development to blastocyst

This is an example of a good quality embryo developing to the blastocyst stage.

EmbryoScope explained

Watch this video to learn more about how EmbryoScope monitors embryo development while minimising disturbances.

IMPROVE YOUR CHANCES WITH EMBRYOSCOPE

The use of time-lapse has been associated with significantly higher ongoing clinical pregnancy rate, significantly lower early pregnancy loss and a significantly increased live birth rate compared to traditional culture.⁵

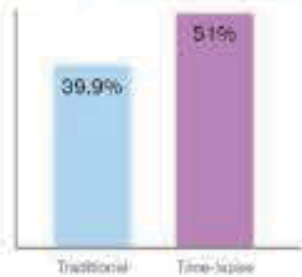
Use of time-lapse for embryo selection increases the chances of achieving a live birth

A report has summarised the combined results of five clinical studies. In 1637 patient treatments, there was a statistically significant improvement in ongoing pregnancy rate as well as live birth rate and a significantly lower early pregnancy loss in the treatments where EmbryoScope was used, compared to traditional culture and evaluation.⁵

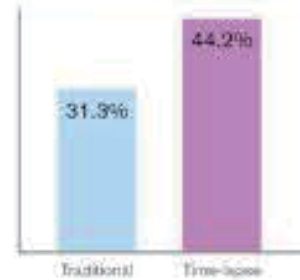
*Actual results vary between individual clinics

**All eligible studies published up to the date of publication

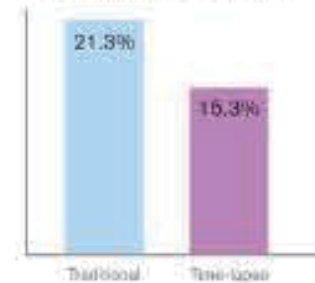
Ongoing pregnancy rate
28%* relative improvement



Live birth
41%* relative improvement



Early pregnancy loss
28%* relative reduction



THE MOST WIDELY

> 1.000.000
TREATMENTS

ADOPTED TIME-LAPSE INCUBATOR WORLDWIDE

EmbryoScope has been used in more than a million patient treatments worldwide since 2009 and has been validated for safety to both embryo and for the health of babies born from use of the technology.⁶

FIND A CLINIC

Please enter a city or country





PRIVATE CLINIC



PUBLIC CLINIC



HI



It was very special to see Maxim as a future baby developing as an embryo in a little time-lapse clip. [...] Now he is 6 months old, it's just a miracle.



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s



IMPROVE YOUR CHANCES WITH EMBRYOSCOPE

Ask your clinician to find out more about EmbryoScope and how it can help improve your chances for a successful IVF treatment.



Collecting the eggs easily and successfully with Sense

A retrieval needle, called Sense, gives you a fast and precise egg collection that retrieves the maximal amount of undamaged eggs without complications.

[READ MORE →](#)

Helping your embryos to implant with EmbryoGlue

EmbryoGlue is a medium that closely resembles the environment in the womb at the time of implantation, which can support implantation even more.

[READ MORE →](#)

Growing and selecting the best embryo with Primo Vision

Embryologists are able to monitor your embryos' development without removing them from the safe environment of the incubator.

[READ MORE →](#)

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