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Each day, all around the world, precious umbilical cord blood is discarded by parents who have no knowledge of its lifesaving benefits for their baby. Did you know that many diseases including certain cancers and blood disorders[1] may be treated with stem cells found in your baby's cord blood?

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Did you know?

"Stem cells, which have the potential to develop into some or all of the specialised cells in tissues and organs provide hope that they can replace damaged cells[2]."

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Reference:
1. List of treatable diseases can be found at www.cordlife.com/sg/treatablediseases
2. Lee, HC 2010, 'The stem-cell hope', The Straits Times, 2 December, p.12.

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baby talk

THE **NEWSLETTER** **FOR** MOTHERS

2011 ISSUE **03**
MICA(P) 245/07/2011

WHAT'S PRECIOUS ABOUT MY BABY'S CORD BLOOD?

IVF JOURNEY IN THE EAST

+

CHOOSE THE IDEAL MOISTURISER

EDITOR'S NOTE

NOWADAYS, PREGNANT MOMS ARE ASKED A QUESTION BARELY HEARD A DECADE AGO; DO YOU WANT TO SAVE YOUR BABY'S CORD BLOOD?

If you begin to research on cord blood banking, the first decision you should make is what are you planning to do with your baby's precious cord blood.

One major benefit is, you can definitely capitalize on its potential medical uses later, for your child and maybe for your family as well.

It might just turn out to be an investment worth looking into as it safeguards the family's health and well-being, ultimately instilling hope for a brighter future ahead.

BabyTalk is a resource dedicated to providing you answers to questions that expectant parents would have and have asked. From topics on tips to follow when carrying a pregnancy to knowing how precious your baby's cord blood is or getting to know and compare childbirth the ancient and new way. bt

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To find out more, log onto **www.cordlife.com/sg/common/bbt.php**

by Cordlife

WHAT'S PRECIOUS ABOUT MY BABY'S CORD BLOOD?

Today, thousands of parents around the world are privately storing their baby's precious cord blood because it contains something special – stem cells. Stem cells are the body's basic building blocks, which can regenerate and turn into the cells that form all of the tissues, organs and systems in the human body.

The first use of stem cells in medicine was to generate healthy blood and immune cells in cancer patients in what we know as a bone marrow transplant. It was discovered in the late eighties that cord blood contains the same haematopoietic (blood) stem cells used for bone marrow transplants and thus the introduction of cord blood stems cells as an alternative source to bone marrow stem cells.

The first umbilical cord stem cell transplantation was performed in 1988, since then over 20,000 cord blood transplants have been performed[1], by 2009, stem cells were recognized as the most common source of stem cell (over bone marrow and peripheral blood)[2] in the pediatric setting.

Today, many diseases including certain cancers and blood disorders can be treated using stem cells[3], and this list looks like it will continue to grow.

WHY CORD BLOOD STEM CELLS?

As we age, so do our stem cells, thus umbilical cord stem cells are the "youngest" and most "primitive" stem cells that we can obtain that do not involve obtaining from a source with both ethical and moral implications.

Besides the current indications for stem cell transplants, there has been a huge amount of research involving stem cells for other applications, like heart disease, stroke, spinal cord injury, cerebral palsy, orthopedic applications and others. This research has now led to numerous clinical trials involving various stem cells in the treatment of these diseases in what we term "cellular therapy".

Cellular Therapy is a rapidly evolving field that holds great promise for the treatment of numerous diseases and also certain diseases where there is currently no medical cure.

The US government has now passed legislation in over 20 states that all expecting parents should be educated on the options available with regards to the cord blood in their baby's umbilical cord and the reasons why they might consider to either store privately or donate these stem cells, rather than just throwing away these precious cells. bt

"Today, many diseases including certain cancers and blood disorders can be treated using stem cells, and this list looks like it will continue to grow."

SOME DISEASES TREATABLE WITH STEM CELLS:

MALIGNANT DISEASES (CANCERS)

- Acute Leukaemia
- Chronic Leukaemia
- Neuroblastoma (Cancer of the nervous system)
- Lymphoma (Cancer of the lymph glands)

NON-MALIGNANT DISEASES

- Fanconi's Anaemia
- Aplastic Anaemia (Severe)
- Thalassaemia (Major)
- Krabbe Disease
- Wiskott Aldrich Syndrome

The list above are some of the diseases that have been treated with cord blood and other sources of the same type of stem cell (Haematopoietic Stem Cell), also found in bone marrow and the peripheral blood. Stem cell therapies continue to change and evolve quickly. Please note that banking your baby's cord blood does not guarantee that the stem cells will provide a cure or be applicable for every situation. The use will ultimately be determined by the treating physician.

Reference:
1. 'Cord Blood Forum' website. (http://www.cordbloodforum.org/biblio/childtx/malignant.html).
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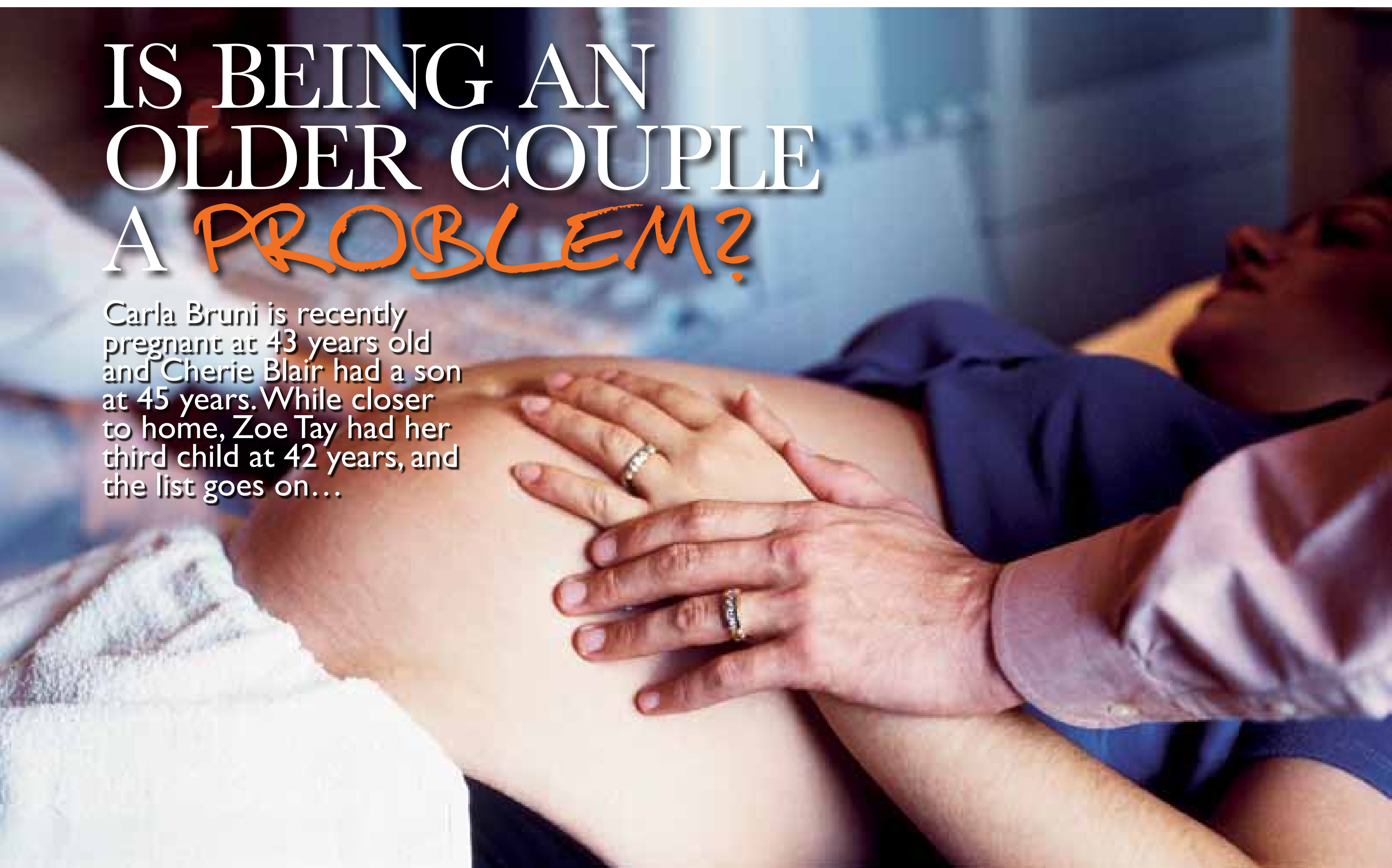
by Dr Ann Tan



IS BEING AN OLDER COUPLE A PROBLEM?

Carla Bruni is recently pregnant at 43 years old and Cherie Blair had a son at 45 years. While closer to home, Zoe Tay had her third child at 42 years, and the list goes on…

WHAT IS OLDER? IS THERE A DIFFERENCE BEING OLDER?

Being older is by definition a mother who is greater than 35 years of age at delivery. It does not matter that she or the couple has had other children before. The older male partner also has a part to play6 and the age and wellbeing of the father should never be overlooked.

WHAT ARE THE ISSUES OF BEING AN OLDER MOTHER?

SHRINKING EGG BANK

At 35 years and above, a woman is more than likely to have used up a large part of her egg bank. She has therefore lesser chances of conception and a live birth than her younger sisters as not only are the number of available eggs smaller, the quality of the eggs are also in question as she is more likely to have abnormal eggs.

INCREASED MISCARRIAGE RISK & INCREASING RISK OF ABNORMAL BABIES

In the 20s, 10% of pregnancies miscarry, 15% between 30 and 34 years and rises to 20% by 35 to 39 years of age, and 35% by 40 to 44 years of age. This is because the number of abnormal eggs increases with the age of the mother thus leading to increasing number of abnormal conceptuses which account for the spontaneous miscarriages.

The risks of having a chromosomally abnormal baby e.g. Down syndrome also increases exponentially after 35 years of age. The risks of Down syndrome rises from 1 in 800 at age 20 years to 1 in 250 for mothers aged 35 years at delivery and increases to1 in 100 at age 40 years.

Risks of Autism and educational disabilities are also linked with increasing age of the mother at conception.

INCREASED RISK OF MEDICAL AND GYNECOLOGICAL DISORDERS

Being older also increases the risk of having developed other medical and gynecological issues. Common medical issues are Thyroid disease whether it is hyperthyroidism or hypothyroidism; Hypertension, Diabetes Mellitus, or even Renal or Autoimmune disorders. Such medical disorders may complicate the pregnancy by increasing the risk of fetal abnormalities should the condition not be optimally controlled e.g. in Diabetes. If Thyroid disease is poorly controlled, there could be potential damage to the fetuses' IQ development as well. There are also risks of developing hypertensive crisis in the presence of renal disease or certain autoimmune disorders.

WHAT TESTS ARE AVAILABLE TO SCREEN FOR THE HEALTH OF THE FETUS?

Maternal serum screening and other tests can give you approximations of risk. For more certainty, tests such as chorionic villus sampling or amniocentesis can provide a firm diagnosis, which allows a woman either to terminate a pregnancy, or help prepare her for the special needs her baby will have. No woman has to undergo any tests if she would rather not have this information.

There is another small but serious risk to the babies of more mature mothers. More babies die in the uterus right at the end of pregnancy in mothers aged over 40. Figures for 2006 show that the rates of stillbirth were steady at around 5 to 6 babies per 1,000 births for women aged 20 to 39, but increased to just under 9 babies per 1,000 births for women aged 40 and over.

This increased risk cannot be explained by complications in the pregnancy or other illnesses alone. For this reason carers are often more vigilant of older mothers in the final weeks of pregnancy.

Despite the increased risk with increased age, it is important to remember that the vast majority of babies are fine. Except for the factor of chromosomal abnormalities, figures suggest that babies of older mothers are no more at risk of most birth defects than those of younger mothers.

WHAT ARE THE ADVANTAGES OF BEING OLDER?

FINANCIALLY & MENTALLY PREPARED

Being an older couple usually implies you are financially in a better position and are mentally more prepared for the changes that a child would bring into their lives as the pregnancy would usually be planned for. Resources for the pregnancy care, nutrition for the mother and her developing baby are usually better. This can only be beneficial to the health of the mother and help her start off at a better footing to motherhood.

WHAT CAN ONE DO TO PREPARE FOR MOTHERHOOD EVENTUALLY?

DIET

Keep healthy, eat fresh foods, take prenatal supplements and ensure adequate hydration at all times. Exercise and keep limber to ensure one's circulation is good as that would definitely enhance quality of egg production.

> "This increased risk cannot be explained by complications in the pregnancy or other illnesses alone. For this reason, carers are often more vigilant of older mothers in the final weeks of pregnancy."

WHAT TESTS ARE THERE FOR THE OLDER MOTHER?

Ensure that the annual health checks are taken and corrective measures are taken to improve the health of the prospective mother eg. diabetes should be treated aggressively to reduce the risk of abnormal babies.

Ensure that all your vaccinations are up to scratch and ensure good nutritional habits and additional of prenatal supplements to reduce the risk of congenital defects.

What effect does age have on the birth itself?

There is a marked pattern of increased intervention with the increasing age of the mother. If you are over 35 you are more likely to have induced labour, an epidural, or forceps or vacuum delivery. Virtually all studies agree that the rate of caesareans also rises with maternal age. This is not necessarily a bad thing as there are always good reasons for interventions.

DOES THE OLDER PARTNER PLAY A PART?

An older male has greater risks of developing medical disorders as well as physical disorders eg varicocele, urinary tract infections or calculi or prostatitis which can negatively influence the quality and quantity of the sperm.

Being an older male also means that his hormones are also lower and his stressful lifestyle may hinder sperm production due to lower quality of life due to decrease male hormones and poorer nutrition. Do ask your partner to have a comprehensive medical review prior to both of you planning for a pregnancy.

IN CONCLUSION

At the end of the day, having a child to add to one's home is always a BLESSING. The journey of becoming a parent is always a joy and one should always feel blessed that one can be a part of a journey with them through unchartered waters. bt

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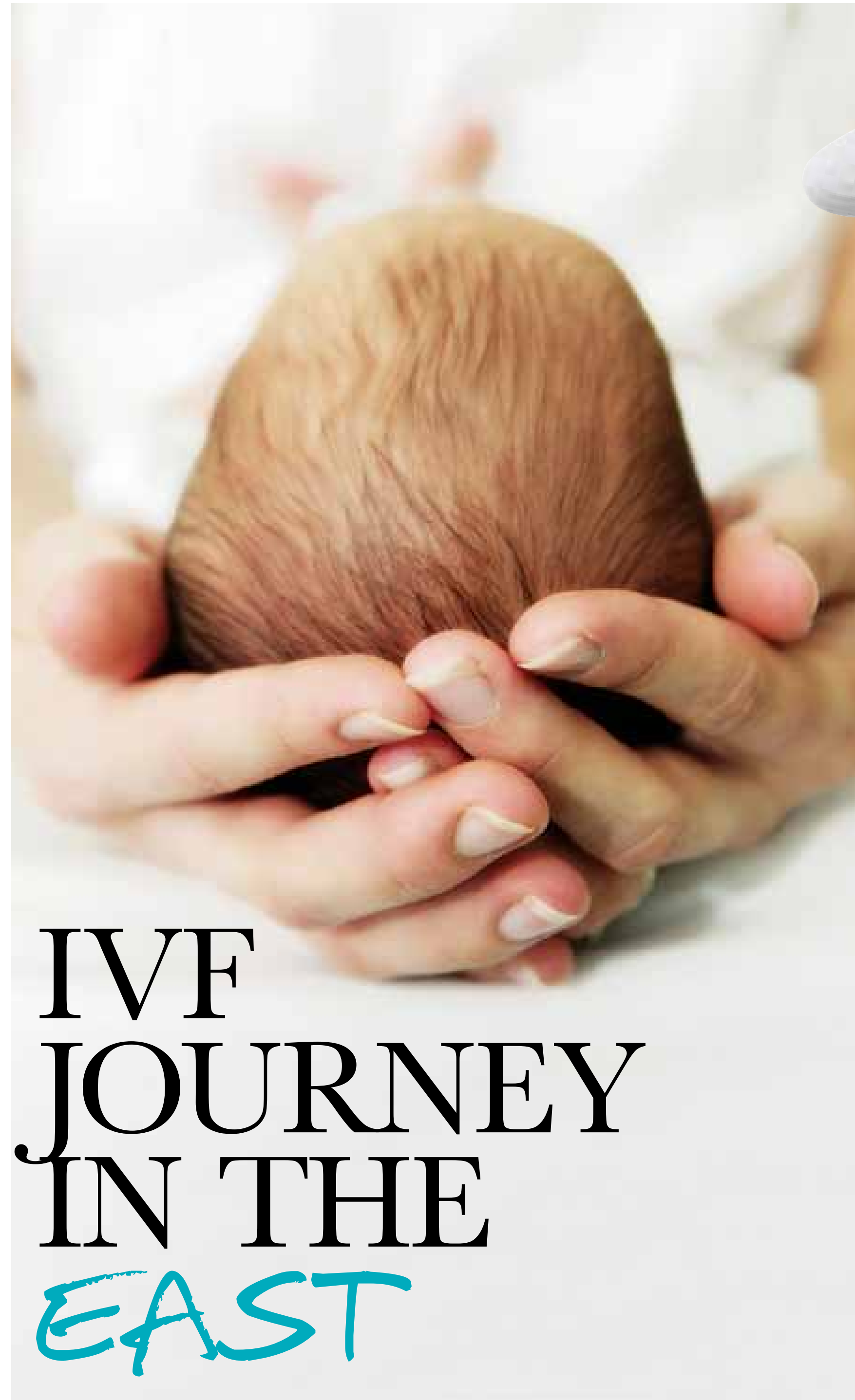
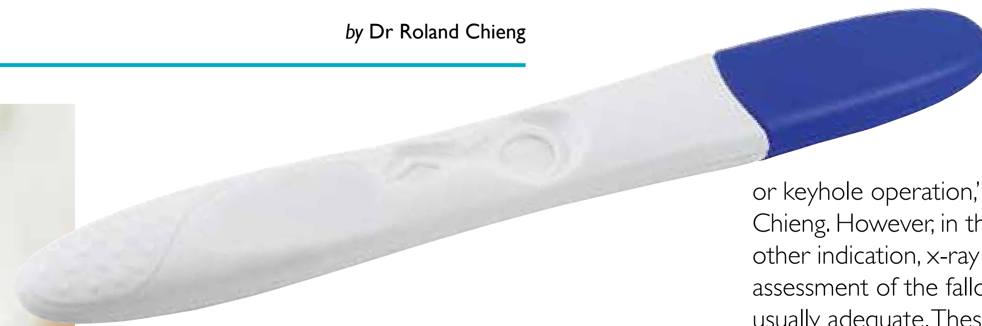


IVF JOURNEY IN THE EAST



Starting an In Vitro Fertilisation (IVF) treatment can be an exciting but nerve-wracking experience. Often, IVF treatment is pursued when other treatments have failed, following months of trying to get pregnant unsuccessfully. Dr Roland Chieng, Obstetrician and Gynaecologist, Parkway East Hospital, takes you through the step-by-step IVF treatment and process.

WHAT IS IVF TREATMENT?

IVF treatment is the very first treatment tried when an egg donor is being used, there are severe cases of male infertility or a woman's fallopian tubes are blocked. Still, this comes after years of trying to get pregnant, followed by a slew of fertility testing. According to the World Health Organisation, incidence is about 10 percent worldwide. Another 10 to 12 percent of all the other couples have only one child and wish to have more. The incidence of infertility is gradually increasing all over the world. For many people going through infertility treatment, the level of distress and tension can be very high. Mutual trust and faith in the doctor can help the couples to enquire about different types of treatment for both the male as well as the female partner, and make informed decisions of their reproductive status.

HOW IS FERTILITY ASSESSMENT DONE?

FOR FEMALE

Assessment of the female fertility includes traditionally, the assessment of ovulation and the physical condition of the fallopian tubes. Various methods are available for ovulation. The most reliable one remains the direct assessment using ultrasound tracking of the egg development in the ovaries. Serial ultrasound visualization of the ovaries will be done to follow the development of eggs from about Day 10 of the cycle till the day of ovulation. Actual ovulation can be confirmed and timed intercourse advice will then be more precise for a possible natural conception.

"The gold standard for assessment of tubal condition is still by laparoscopy or keyhole operation," says Dr Roland Chieng. However, in the absence of other indication, x-ray or ultrasound assessment of the fallopian tubes is usually adequate. These can be done in the clinic setting.

01 Blood Test For Follicle-stimulating Hormone (FSH) Level at the Time of Menses – It dictates the amount of medication required for successful stimulation of the ovaries for egg development.

02 Antral Follicular Count (AFC) – This is done by 3-D ultrasound examination of the ovaries. It has to be done at Day 2 of menses and measures the number of new egg follicles before stimulation is started.

02 Hysteroscopy – This is done after the end of the period. This is to ensure a normal uterine cavity before starting IVF.

03 Trial Cannulation – This is a process whereby a trial run embryo transfer is done before the actual procedure.

FOR MALE

Assessment of the male is of equal importance before IVF. Full assessment goes beyond just semen analysis or sperm quality assessment. There are numerous conditions in the man that are amenable to treatment which will restore the chances of spontaneous pregnancy.

01 Semen Analysis and Culture – A detailed semen analysis is necessary to determine the method of obtaining sperms at the time of IVF, whether obtaining sperms normally through masturbation or surgery.

02 Sperm Function Test – Sperm function test includes DNA fragmentation test, Hyaluronon Binding Assay (HBA), egg penetration test and others. Besides providing an explanation for the infertility, these tests also help to confirm the need for Intracytoplasmic Sperm Injection (ICSI) or microinjection of the sperm into the egg for fertilization in IVF.

WHAT IS INVOLVED IN IVF TREATMENT?

There are basically four steps in the IVF and embryo transfer process which include:

STEP 1: Ovarian Stimulation

Injections are used during ovarian stimulation to stimulate multiple eggs to grow in the ovaries instead of having a single egg that normally produces each month. Some eggs will not fertilise or develop normally after fertilization. With multiple eggs, the chances of successful treatment become higher. With the use of ultrasound examination, the follicles can be identified and assessed serially till the appropriate day for egg retrieval.

STEP 2: Egg Retrieval

Egg retrieval is a minor surgical procedure that is performed via the vagina route. During this time, both ovaries will be enlarged with egg follicles and they will be right next to the vaginal wall. A small injection using an aspiration needle is made through the wall under ultrasound guidance. The needle is connected to a suction device. Eggs will then be aspirated from all the follicles. Multiple eggs can be aspirated in less than 15 minutes.

STEP 3: Fertilisation

Once the retrieval of eggs is completed, they are observed in the laboratory for maturity and quality. Fertilisation is achieved either through Insemination, where the motile sperm are placed together with the eggs incubated overnight or through ICSI, where a single sperm if directly injected into each mature egg. Successful fertilisation can be assessed the following day.

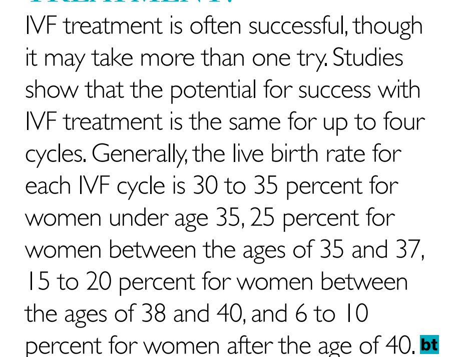
STEP 4: Embryo Transfer

Embryos are fertilised eggs. Embryo transfer is the last step in the IVF process. One or more embryos suspended in culture medium are drawn into a transfer catheter with a syringe on one end. The tip of the transfer catheter is guided through the cervix, and embryos are placed into the uterine cavity.

The number of embryos transferred is the most important factor for the development of multiple pregnancies. Commonly, Dr Roland Chieng advises only for two embryos to be transferred at any one time.

HOW EFFECTIVE IS IVF TREATMENT?

IVF treatment is often successful, though it may take more than one try. Studies show that the potential for success with IVF treatment is the same for up to four cycles. Generally, the live birth rate for each IVF cycle is 30 to 35 percent for women under age 35, 25 percent for women between the ages of 35 and 37, 15 to 20 percent for women between the ages of 38 and 40, and 6 to 10 percent for women after the age of 40. bt



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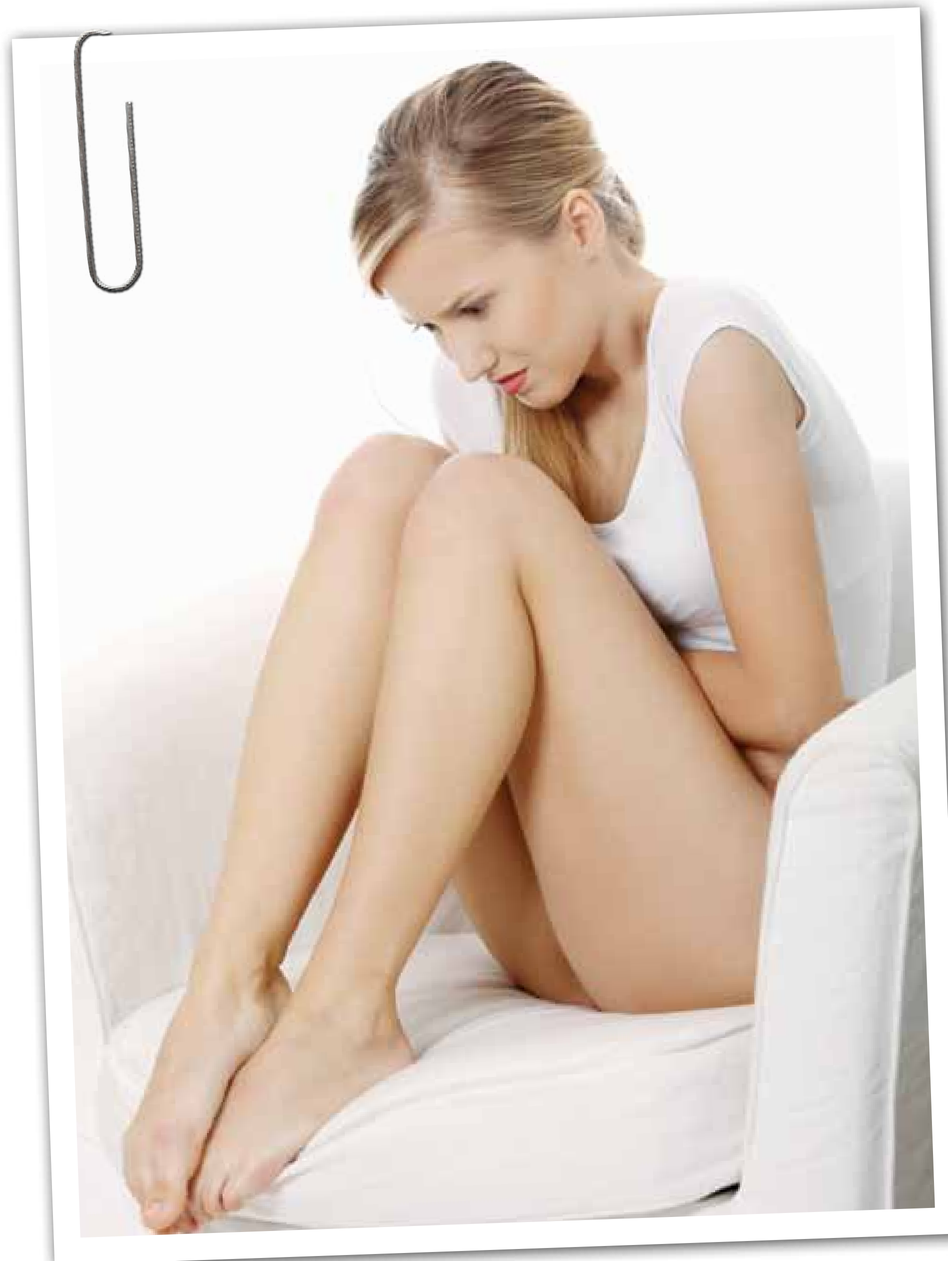
by Dr Christopher Ng

ENDOMETRIOSIS



1 WHAT IS ENDOMETRIOSIS?

Endometriosis is a common medical condition characterized by growth of endometrium (the tissue that normally lines the uterus) beyond or outside the uterus. It looks and acts like tissue in the uterus. It most often appears in places within the pelvis:

- Ovaries
- Fallopian tubes
- Surface of the uterus
- Cul-de-sac (space behind the uterus)
- Bowel
- Bladder and ureters
- Rectum

Endometrial tissue may attach to organs in the pelvis or to the peritoneum, the tissue that lines the inside of pelvis and abdomen. In rare cases, it also may be found in other parts of the body. Endometrial tissue that grows in the ovaries may cause a cyst (endometriotic cyst) to form. Endometrial tissue outside the uterus responds to changes in hormones. It breaks down and bleeds like the lining of the uterus during the menstrual cycle. The breakdown and bleeding of this tissue each month can cause scar tissue, known as adhesions. Adhesions can cause pain. Sometimes, adhesions bind organs together. The symptoms of endometriosis often worsen over time. In many cases, treatment may may prevent the condition from getting worse.

2 WHAT CAUSES ENDOMETRIOSIS?

The causes of endometriosis are still unknown. A common belief is due to retrograde flow of menstrual blood to the pelvic cavity.

3 WHAT ARE THE SIGNS AND SYMPTOMS OF ENDOMETRIOSIS?

Women may complain of the following :

- Heavy and sometimes irregular menses
- Painful periods
- Pain during sex (this is a deep pain during penetration)
- Pain in the pelvis or lower abdomen in between periods
- It may be associated with infertility.

It is estimated that 30-40% of women with endometriosis may have difficulties in becoming pregnant i.e. unable to conceive after 1 year of regular intercourse. The age-dependent cycle fecundity (monthly) rates in healthy fertile women range between 15 and 25%. That chance is less than 1% for women with severe endometriotic disease.

4 HOW COMMON IS ENDOMETRIOSIS?

The prevalence of endometriosis is around 5%-20% of women of reproductive age. About 30% to 40% of women with endometriosis are infertile.

5 IS THERE ANY AGE GROUP WHICH IS MORE PRONE TO ENDOMETRIOSIS?

It is more common in women of reproductive age between 20s-40s. The literature seems to indicate that Caucasian women are at greater risk of developing endometriosis than Afro-Carribean.

6 IS THERE A CURE FOR ENDOMETRIOSIS?

As endometriosis is hormonally related, there is no permanent cure for endometriosis short of natural menopause or surgical menopause (by removing the ovaries) but even then there are reports of endometriosis found in menopausal women although rare. There are however treatments to help women manage and deal with their symptoms. For some women pregnancy can lessen the symptoms and effects of endometriosis. The reality is that pregnancy, like hormonal drug treatments, usually suppresses the symptoms of endometriosis but does not eradicate the disease itself. Symptoms may or may not recur after the birth of the child. Most women can delay the return of symptoms by breastfeeding, but only while the breastfeeding is frequent enough and intense enough to suppress the menstrual cycle. Doctors sometimes advise women with endometriosis not to delay having children because endometriosis tends to worsen with time. The longer you have endometriosis, the greater your chance of becoming infertile.

7 HOW IS ENDOMETRIOSIS DIAGNOSED?

Besides a thorough history to determine if you have any characteristic symptoms to suggest the presence of endometriosis, your gynaecologist will perform a pelvic exam. This is to try to localize the area of pelvic pain. Other causes of pelvic pain would have to be ruled out. A pelvic ultrasound scan can be used to detect endometriotic cysts and this is usually combined with blood Ca125 investigation (which can be raised in endometriosis).

Endometriosis can be mild, moderate, or severe. The extent of the disease can be confirmed by looking directly inside the pelvis using a laparoscopy (key hole surgery). You will be given general anesthesia for these procedures. The endometriotic lesions as well as endometriotic cysts and adhesions can also be removed during a laparoscopy.

8 WHAT ARE THE SURGICAL AND NON-SURGICAL TREATMENTS AVAILABLE?

Treatment is directed at either relief of pain or infertility. The treatment options for pain range from:

- Analgesics (Pain killer)
- Combined oral contraceptive pill
- Progression intrauterine device (Mirena)
- Danazol (Amle hormone compound)
- Oral progesterone (Visanne)
- Depot progesterone injections (Depoprovera)
- Gonadotropin-releasing hormone (GnRH) agonists — to create a tesendo menopausal state

They are equally effective but their side-effect and cost profiles differ. Suppression of ovarian function with any of these medications for several months reduces endometriosis-associated pain.

Surgery may be advisable for some women in whom medical treatment has failed to relieve their pain or infertility. The goal of surgery is to remove or coagulate all visible endometriotic peritoneal lesions, endometriotic ovarian cysts, deep rectovaginal endometriosis and associated adhesions, and to restore normal anatomy. Ablation of endometriotic lesions plus removal of endometriotic adhesions to improve fertility in endometriosis is effective. Laparoscopic surgery can almost double the chance of pregnancy and a live birth for women with mild endometriosis compared with not having the surgery. Following surgery, rates of pregnancy for women with mild endometriosis as their only fertility problem range from 81% to 84%. Those with moderate or severe endometriosis, including damage to the ovaries, have a 36% to 66% chance of conceiving after surgery. Pregnancy rates are highest within a year of surgery, since endometriosis commonly recurs in spite of the operation.

In addition, SOIUI (superovulation intra-uterine insemination) or IVF (in vitro fertilisation) may be required in women who fail to conceive following surgery. Treatment with SOIUI improves fertility in minimal to mild endometriosis but tubal patency is a prerequesit. IVF is appropriate treatment, especially if the tubes are blocked, if there is also male factor infertility, and/or other treatments have failed. bt

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by Dr Chin Shou King

TAKING BABY STEPS WITH BABY TEETH

As a dentist, I am often beset with worried parents, concerned about their children's teeth. They often ask why the teeth came out so large or small in size, why they are so crooked and whether they will need braces next time. Usually these 'problems' are a little exaggerated and an examination often reveals that the child is fine. All we need to do is a little explanation and reassurance to the worried parents, followed by careful monitoring and follow up.

However, I do come across the odd parent who has little or no concern for their child's teeth at all and I become the worried one! The child has not been taught how or when to brush their teeth and they show up with whopping huge cavities and sometimes toothaches. Some parents are under the misconception that the deciduous or 'baby' teeth are not important and will be replaced in due time. This is not only dangerous, but can be detrimental to the child's psychological and overall well being.

Research has shown that people with high DMFT (decayed, missing or filled teeth) rates for deciduous teeth often have a higher DMFT number for their adult teeth as well. Good brushing habits and regular check ups with the dentist must be instilled and inculcated when young and your child will grow up to be an adult with a healthy set of permanent teeth.

The deciduous set of teeth is not only important for your child's speech and eating but also maintains the space for the adult teeth. An early loss of teeth before the age of 5 should be avoided as much as possible. Early loss of the deciduous molars may sometimes require the placement of a small device called a space maintainer. This is to prevent the first adult permanent molar which erupts at around age 6 from drifting forward and taking up the space of other permanent teeth which may result in crowding when these teeth eventually erupt.

So when is a good time for children to start seeing the dentist? There is no hard and fast rule, but the American Academy of Paediatric Dentistry recommends that every child sees the dentist before his or her first birthday. It may sound ludicrous to bring your child to the dentist so early, but if we take a step back and look at the big picture it makes perfect sense.

The dental clinic can be a foreign and scary place. Furthermore the media, friends and relatives may play up to the common idea that dental treatment and dentists 'equals pain'. By bringing your child into the clinic before all these ideas are allowed to take hold, he or she will be allowed to form his own ideas about dental treatment even if his or her cognitive abilities have not been fully developed. The first appointment is usually spent introducing your child to the clinic, the fancy dental chair and the (hopefully) friendly and warm dentist. A cursory check-up is done to ensure there are no potential problems and parents are taught oral hygiene measures for their precious one as well as diet advice. Treatment, if any, is rare during the first visit and the visit is meant as a pleasant introduction to the dental office. The child goes home with a positive experience and a bond between the child and dentist is formed.

> "The deciduous set of teeth is not only important for your child's speech and eating but also maintains the space for the adult teeth."

During the next visit 6 months later, the child remembers his pleasant encounter and is not fearful about anything new and foreign. For some children, there is still a certain level of anxiety and the dentist will use his or her discretion on what should be done. Kids who are 'ok' will have a simple polishing of their teeth done to get them used to having dental instruments in their mouths. Other more fearful ones may just have a check up and positive reinforcement messages until they are less fearful.

Now consider a child about age 3 who has never been to a dentist. He develops a toothache and has to be seen as an emergency patient. His first visit is already marred by the pain in his tooth and the dentist indicates either an extraction or a pulpectomy (the removal of the dental nerves of the tooth). Either treatment is invasive and far from pleasant. The child will begin to equate dental treatment and the dentist with pain. This negative attitude can and will lead to dental phobias later on in life. He will grow up to be an adult who avoids going to the dentist unless he absolutely has to. He will miss regular check ups and small problems that could have been rectified early will become bigger problems involving higher cost and more pain.

Research has shown that a lot of dental phobias are a result of a negative experience, often as a child and often during their very first visit to the dentist. As mentioned before, media stereotypes and 'horror stories' from older cousins or uncles/aunts further play up to a would-be unpleasant encounter. Imagine how you could counter all these effectively with just a simple thirty minute check- up done early in life. bt

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by Associate Professor Giam Yoke Chin

EXPERT'S TIP ON HOW TO CHOOSE THE IDEAL MOISTURISER

Associate Professor Giam Yoke Chin, Senior Consultant, National Skin Centre, Singapore, advises: "Cutting-edge technology in physiological moisturisers allows some creams to be presented in a lamellar structure, similar to our natural skin lipid. Moisturisers that mimic this lamellar structure can fit better into the natural skin barrier, helping to repair and rehydrate the skin."

"Look out for ingredients such as ceramide and other physiological lipids in product labels. These ingredients are present naturally within your skin and help to repair the skin barrier by locking in moisture and preventing water loss and allergies. Natural moisturising factor is another ingredient you can look out for."

BABY SKIN VS ADULT SKIN

The skin of a baby differs from adult skin in several ways. Baby's skin is thinner than that of the adult skin. Consequently, the baby is more susceptible to suffering from water loss from the skin, skin damage, infection and toxicity from topically applied agents. Optimized skin care for your baby can help minimize such skin conditions.

WHAT IS DRY SKIN?

Dry skin is a common symptom of a number of chronic conditions such as eczema or atopic dermatitis. Dry skin may also be caused by environmental factors such as exposure to air-conditioning, frequent showering and using harsh soaps. It is often associated with itch, unsightliness of skin and discomfort. If left untreated, dry skin may potential develop into a chronic condition.

SYMPTOMS OF CHRONIC DRY SKIN CONDITION INCLUDE:

- Dryness
- Flaking skin
- Itch
- Redness
- Broken skin
- Thickened skin
- Cracked skin
- Bleeding

DRY SKIN MANAGEMENT CHECKLIST

- Remove all trigger factors, e.g. pet fur, dust, smoke, pollens, harsh soaps, heat and house dust mite.
- Keep fingernails short or wear mittens to avoid scratching
- Wear loose cotton clothing
- Shower with a soap-free cleanser in lukewarm / cool water for 5 – 10 mins, 1 – 2 times daily
- Lightly pat the skin dry (do not rub)
- Apply a moisturiser over the entire body surface immediately after bath, 2 – 3 times a day
- Consult a doctor if the skin condition persists and do not improve.

ARE CONVENTIONAL MOISTURISERS GOOD ENOUGH?

Conventional moisturisers only replace the skin moisture temporarily without repairing the lipid layer of the damaged skin. Prolonged and regular use of moisturiser which contains conventional synthetic emulsifiers may dissolve the skin natural lipid and damage your skin's natural protective layer thereby increasing skin dryness.

An ideal moisturiser would perform the following:

01 Restore the skin lipid layers by mimicking and enhancing the skin's natural moisture retention mechanism.

02 Hydrates the skin to reduce water loss and keep skin moisturized.

03 Suitable for sensitive skin: hypoallergenic, fragrance-free and non-comedogenic.

04 Provide long-lasting moisturising effect. bt

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