

A Lifetime of Protection.

Your little one will be happy to know that he is well-protected for life.

You can seek to give him that lifetime protection by saving his precious cord blood stem cells. Such stem cells have been proven useful in the treatment of some diseases¹ such as certain cancers, inborn errors of metabolism, blood disorders and immunodeficiencies.

Isn't this what your precious little one needs the most?

Your baby's cord blood can only be collected at birth. Make the decision to save his cord blood with Cordlife.

Call 6238 0808 or visit www.cordlife.com/sg to find out more.

Reference: 1. List of diseases treated can be found at www.cordife.com/sg/treatabledisease 2. Lise, HC, 2010, "The stem-cell hope", The Straits Times, 2 December, p.12.



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 cells². 33













THE **NEWSLETTER FOR** MOTHERS
2013 ISSUE **01**MICA(P) 245/07/2011



WHY CORD BLOOD STEM CELLS







EDITOR'S NOTE



TEXT DIT
EXERIATIUMET
LABO. UT
QUISIT OFFICI
DERRORRO INTIN
CULPARUM EUM
ULLA DITIORES
CONSEQUE PORUM
ESTIO. ET MAXIMIL

Bis ipsum eatur, senis molorro rposam ant quiaerchic temporae voluptatus qui quidebit qui amenihi tatiand ioriore provid excea de pro ex et plitibus re non re, quaeperibero blaborr ovidellab incipiet latio. Pa volupta tionsequibus si idestinum fuga. Ut latet ma quia aliquas pelignis rem alis nem dusametur? Lorendi ssinullamus ipsam, qui blaboreribus aut lique percil mossusae quam, omnimaximi, alisin re repudam usapiti umquam, etur, ulpa sed etus nonseguo incto inveliguis aut erro volute nem ventem inum que volo quuntiis mo eosam re, comniatia inumet quia nimi, sam faccabo. Ucimolu ptiume nis excero corem escium illiqui delitib uscimpo repero dis adiore cus, saperibus doloribusa nobisci muscilitati ut esti am doluptas et lit re nus.

Et licid qui nienestias dolorio sapicti scipis resti te secte si ditaspe ditior aut iuriori atquatiate consent minventi.

Cordlife Group Limited

New address please

Contact

Tel: (65) 6238 0808
Email: editor@cordlife.com
Website: www.cordlife.com/sg
Facebook: www.facebook.com/cordlife

SPECIAL THANKS TO OUR CONTRIBUTORS:

Dr Alex K H Ooi, MBBS, MMED [O&G], FRCOG, FAMS, FICS, MBA Choo Wan Ling, MBBS (Singapore), M.Med (O&G), FAMS Dr Wong Heng Fok, MBBS (Singapore), MRCOG (London, UK)

CONTENTS

Issue 01 / 2013

WE HAVE

MOVE TO A'POSH BIZHUB!

"Marking as another significant milestone in the Group's corporate history since being listed on the SGX mainboard in March 2012, Cordlife has moved its corporate office and laboratory facility to a new location at A'Posh BizHub in Yishun."



page 07 health facts

EDUCATIONAL MESSAGE BY CORDLIFE

"Reped quo comnis el imoloris voluptas autem. Ribus magnim fugiatis re od ut ipidebissit, ipsum voluptatur sae doluptatur, temporepe consed ma volorumquam aut ad magnam a sant aut eictes eari consequia quo bero."

page 09 health facts

GYNECOLOGY AND THE BEAUTY OF LIFE

"Stem-cell technology and applicability is advancing rapidly and its storage is insurance, in that you hope never to need its potential, life-giving, benefits. But the practical reality of the ability to correct a disease by progenitor cells is a stark reminder of how fragile human creation itself is and how prevalent it is we take our bodies for granted when in good health."

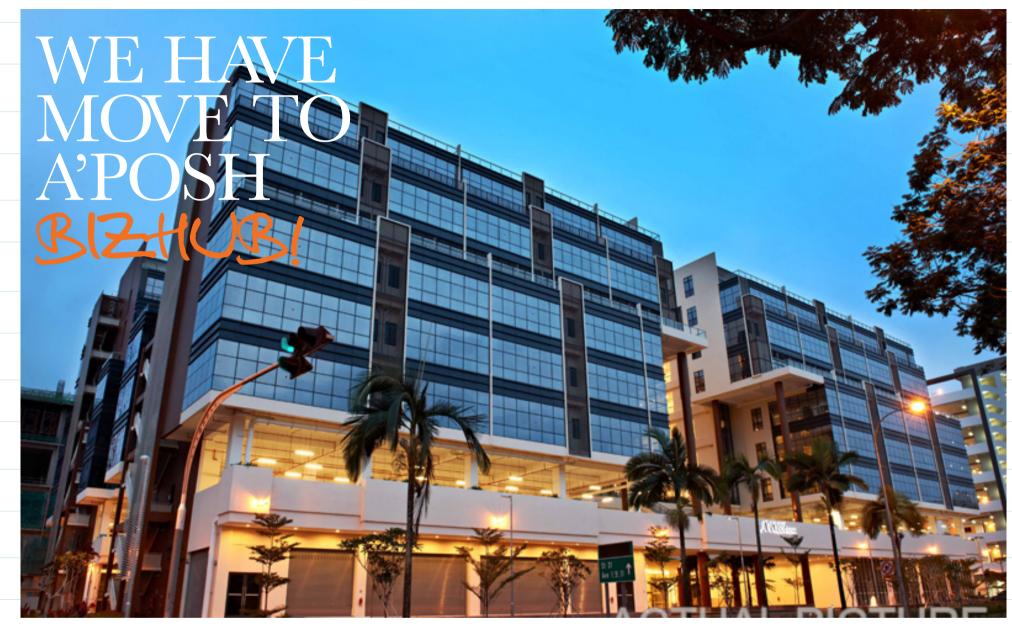
THE GIFT OF LIFE

"Having a baby is truly remarkable. From mutual love that creates new life, to the very first kick in your belly and ultimately to the climacteric birth of your baby, the journey is nothing short of a miracle."

VAGINAL INFECTIONS

"When doctors say "yeast," we usually mean a fungus named Candida albicans. It's common on the skin and can be found in the gastrointestinal tract anywhere from the mouth to the anus."





This new premise can potentially house up to 500,000 cord blood units which is coherent to Cordlife's expansion plans to capture the growing affluent markets, both domestically and from its neighboring countries. Expectant parents, the overall target audience of Cordlife will also benefit from this premeditated shift as rental saving will ensure its continuous pursuit of quality refinement and offering of competitive pricing over other alternative in the industry.

With the move, over 100 Cordlife's employees, including human resource, customer service, marketing channels, finance, quality control, information technology, regional business development consultants and laboratory will be integrated under one roof for greater productivity, efficiency and customer effectiveness. This includes nurturing and developing talent, and giving its people a whole host of opportunities to develop their careers in a modern and comfortable work environment.

A special project team was formed based on stringent selection criteria to manage this re-location process with the main purpose in administering a smooth moving transaction without compromising the existing samples and disrupting Cordlife's daily operation. Tremendous effort was put into this project by



arking as another significant milestone in the Group's corporate history since being listed on the SGX mainboard in March 2012, Cordlife has moved its corporate office and laboratory facility to a new location at A'Posh BizHub in Yishun. This new premise is a BCA Green Mark- GOLD Award winning building, which is ecological friendly and professes to provide an indoor environmental quality for a healthy and productive workplace for their tenants. It is another major step in Cordlife's growth plan for its expansion phase

of its business as the previous location was unable to house the growing number of 50,000 cord blood units. Thus, this strategic decision to purchase 20,000 square feet of wholly-owned estate will only make sense in an ever-increasing cost of commercial leasing in Singapore. The main reason for this tactical shift is to align Cordlife's continuous effort in unlocking value for its stakeholders by releasing from rental obligation for the next sixty years; this will warrant a more predictable growth and earnings for the company.

Expectant parents, the overall target audience of Cordlife will also benefit from this premeditated shift as rental saving will ensure its continuous pursuit of quality refinement and offering of competitive pricing over other alternative in the industry."

the team in executing these plans. Huge financial investment was placed into the new laboratory se

placed into the new laboratory set up, mainly in constructing a cleanroom which is compliance to 'Grade A' standards to meet the criteria in achieving both AABB re-accreditation and FACT NETCORD accreditation for the new facility. It will definitely enhance the overall assurance for Cordlife customers who have placed their trust in its quality standards all these years.

Being a leading service provider of stem cell banking from cord blood, these fundamental perspectives will

babytalk feature story





guarantee competitive advantages over its competitors in a market where parents are more likely to want to store their children's cord blood since they are having fewer kids.





SEPAX 2 PROCESSING AD (JAN)



Incidence rate of stem cell treatable diseases

- Lymphoma is one of the top 10 cancers afflicting Singaporeans¹.
- 2 to 3 in 1,000 children are diagnosed with Cerebral Palsy².
- 20 to 40 children are diagnosed with Type 1 Diabetes³.
- Clinical trials successfully treating children with Cerebral Palsy⁴ and Type 1 Diabetes⁵ – currently treatable only with the child's own cord blood stem cells - have shown promising results.
- Many diseases are now treatable using cord blood stem cells and possibly more in the future6.

Chances of using stem cells

- 1 in 217 chance that a person may need cord blood stem cells for treatment in their lifetime7.
- 8 cord blood units were released for transplants and therapeutic applications by Cordlife Group.

Higher chance of finding a match within the patient's family

- 60% of cord blood transplants by ViaCord were from siblings. 40% were for self-use8.
- 25% chance of a 100% match between siblings. A perfect match is required for bone marrow transplants, but not in cord blood
- \$27,000 is the minimum cost of buying back a donated cord blood unit in Singapore, if it is still in storage10.

Availability of stem cells

- 50% of all donations to a public cord blood bank are normally discarded
- 100% your accessibility to your privately stored cord blood stem cells.

An educational message on private cord blood banking brought to you by



These are just some of the reasons why we believe in responsible private cord blood banking.

Cerebral palsy baby helped by cord blood

- Reported in The Straits Times in HOME NEWS section on Thursday, December 3, 2009 Pg B6

"Our daughter Georgia was diagnosed with cerebral palsy (a type of brain injury that has no known cure), as a result of being stuck in the birth canal at childbirth... She was the first in Singapore to be infused with her own cord blood stem cells... We truly feel that we have used Georgia's stem cells at the right time and for all the right reasons... We, like the many other parents around the world who are trying stem cell technology, are seeing results. And, we like all those other parents, will continue to consider stem cells as part of Georgia's future therapy program."12

- Louise Conn, mother of Georgia Conn (Louise decides to use Georgia's stored umbilical stem cells for Georgia's own cerebral palsy treatment)

Leukaemia boy saved - by baby sister

- Reported in The Straits Times in PRIME NEWS section on Thursday, July 1, 2004 Pg 6

"A 3-year old boy, Ryan Foo was diagnosed with leukaemia. His parents had banked his younger sister's cord blood with Cordlife (a trusted family cord blood bank in Singapore with AABB accreditation) and then it was transplanted into him. Ryan was given the maximum chance of success because his sister's cord blood stem cells were a 100% match to his. Ryan's condition has shown a significant improvement and he is able to attend school now."13

Call 6238 0808 now to learn more about how you can protect your family's health.

- National Cancer Centre Singapore. Cancer information: Cancer statistics. Website. www.nccs.com.sg. Assessed November 5, 2012.
- Cerebral Palsy Organisation website. http://cerebralpalsy.org/aboutcerebral-palsy/prevalence-of-cerebral palsy. Assessed November 5, 2012.
- Diabetes Society of Singapore. Diabetes Singapore.
- ViaCord website, www.viacord.com, Cord Blood Registry website.
- www. cordblood.com. Assessed November 5, 2012. Full list of diseases can be obtained from Cordlife information pack.
- Nietfeld JJ, Pasquini MC, Logan BR, Verter F, Horowitz MM. Lifetime probabilities of hematopoietic stem cell transplantation in the U.S. Biol Blood Marrow Transplant, 2008;14:316-322.
- 8 ViaCord website. www.viacord.com. Accessed November 5, 2012.
- National Marrow Donor Program website, www.marrow.org. Accessed November 5, 2012.
- Eve Yap (November 4, 2012). Public or private bank? The Sunday Times.
- Channel News Asia. (February 18, 2009). Public cord blood bank doubles number of transplants.
- 12,13 Cordlife website. http://www.cordlife.com/sg/en/successful-cases. Assessed November 5, 2012.

Singapore's first AABB accredited private cord blood bank.









GYNECOLOGY AND THE

BEAUTY

OF LIFE

Stem-cell technology and applicability is advancing rapidly and its storage is insurance, in that you hope never to need its potential, life-giving, benefits. But the practical reality of the ability to correct a disease by progenitor cells is a stark reminder of how fragile human creation itself is and how prevalent it is we take our bodies for granted when in good health.

hen asked to pen an article, I reflected on my experiences in the course of my work and decided to do something basic, non-academic for a change, on an appreciation of the beauty that emanates from the wonder of nature, life.

My pursuit of a career has seen that career become a part of my life — over 30 years on and still loving every moment of it. Managing the problems of patients and the attendant interaction with them and their relatives who come along for their visits, have both been the inspiration and source of a lifestyle philosophy.

The sleepless nights delivering a baby, performing caeserians or major pelvic surgeries can be worrisome but what in life is entirely not so? Stress is a necessity of and gives meaning to life. Patients who embrace and utilize it to bring about good outcomes handle their problems much better. Those who desire a "stress-free life" grapple for an unattainable goal, which often delays recovery from illness. Stress is perceived – even simple acts are very stressful to some whilst a breeze to others. By taking the latter

attitude, positivity predominates.
In the course of healing illness and managing difficult transitions, I sense that many patients also wish to look and feel good. This led to my incorporating simple life-enhancing protocols for

body and mental wellbeing. My sub-interest in keyhole surgery also led me to include liposuction/fat transfer to my range of services — a natural adaptation of a main surgical discipline of working through small openings for a major outcome.

An oft-heard admonition of "age is but a number" is indeed a good attitude to adopt. Patients who take action to manage their hot flushes, tissue laxity, loss of libido, wrinkles, pigmentation, aches and pains, loss of hair, fat in unwanted places, etc besides health issues, and are steadfast

in facing up to them, are much better off. Patients who tend to grumble about already reaching 50, 60, even 40 and do nothing to resolve the problems that brought about the conclusions, seem to be locked in disgruntlement. However, those with realistic expectations and are mindful that any medical and life-style advances applied are only to defer the inevitable effects of ageing, (which nevertheless, is a gain in itself) are happier in life.

This one life we have, fraught with dangers and problems, is also filled with much joy and rewards. There is no necessity to push to the limits of indulgence and keeping up with the Joneses. Needs for living a life to its fullest are simple, easily attained and readily enjoyed by keeping a positive mind and a gratitude for the many mercies we receive from moment to moment. Talking about "needs" brings me to the other two ingredients of youthfulness.

Stress is a necessity of and gives meaning to life. Patients who embrace and utilize it to bring about good outcomes handle their problems much better."



Patients who understand that a car needs its cylinders greased, tyres inflated and tank filled, lead a fuller life of less illness by regular, effective (and targeted if for shaping) exercise. This is vital as we age. Mine is gym work of cross-trainer, stretching and crunches. Choose one that suits you and always find the time to fit exercise into your schedule. It will certainly make you feel (release of endorphins) and look good besides the proven health benefits. Even those among my younger patients who do not exercise face more difficulties in both delivering babies and undergoing major surgery. Further, these patients tend to be overweight, a situation with its own set of issues. The body's ability to handle such stresses is compromised and this is magnified in the case of older patients. We tend to be less active and expend less as we age and thus, older means more exercise please!

As to eating well, well, it is not about how rich or expensive but picking natural foods with reduced calories and fat. It does not mean being choice-restricted as there is indeed a large range of good food. Can be tough for a start and to maintain but once in place, makes for more gain, health and youthfulness. Many patients who do well also look at taking supplements, avoiding medicines and vitamins wherever feasible. And, oh yes, quit smoking and reduce alcohol intake!

Be positive, exercise regularly and eat well. These, along with managing disposition and self-image, will go a long way to reducing incidence of and speeding recovery from illness.



Dr Alex K H Ooi MBBS, MMED [O&G], FRCOG, FAMS, FICS, MBA. Gynecologic Minimal

THE GIFT OF LIFE



FROM CONCEIVING TO DELIVERING

aving a baby is truly remarkable. From mutual Love that creates new life, to the very first kick in your belly and ultimately to the climacteric birth of your baby, the journey is nothing short of a miracle. While your joy is immense, it is only natural to have concerns at any point during this life changing experience. For instance, you may be anxious to conceive, or could be apprehensive about childbirth.

DIFFICULTY IN CONCEIVING: ARE THERE SIMPLER TREATMENTS BEFORE IVF?

As a woman ages, her chances of

conceiving are slimmer, particularly above the age of 35. For women, the common causes of infertility include: ovulation problems, blocked or unhealthy fallopian tubes and endometriosis. For men, absent, insufficient or defective sperms due to hormonal and genetic disorders, heavy smoking, varicocoele and infections may also hamper fertility. Treatment would involve resolving the abnormalities and individualizing therapies to obtain the simplest, cheapest and safest modality with reasonable success.

Options would include:

I. Better understanding of the fertile period

Knowledge and timing of the fertile period is essential, coupled with

frequent sexual intercourse. Timed sex with ovulation – predicted from urine tests and a good menstrual calendar – may improve conception rates.

2. Treating underlying hormonal disorders

80—90% of women achieve ovulation once hormonal abnormalities are corrected, increasing the chance of conception. This can be achieved with fertility drugs ranging from oral medications to injections to boost ovulation.

3. Intrauterine insemination

Chances of conception can be further improved with intrauterine insemination in cases where there is mild sperm defect. This is a simple procedure where washed sperms are flushed into the womb at the time of ovulation.

4. Corrective surgery

Depending on the damage to the fallopian tubes, tubal surgery may be helpful. Success of pregnancy following tubal surgery is variable. Compared to IVF, surgery is a one time treatment with a higher potential for long term fertility. Surgery in endometriosis improves fertility rates but not back to normal levels.



Simpler options should be considered first before IVF but it may be needed for severely damaged fallopian tubes, significant endometriosis and considerable sperm abnormalities. Concerns surrounding IVF include cost, psychological, emotional and physical stress, higher risk of multiple pregnancies and premature birth. Successful conception hinges on a myriad of factors concerning both partners. Do seek medical consultation if you and your partner are unable to conceive after having regular, frequent, unprotected sex for a year.

With increasing educational and socio-economic status,

there is a trend towards

deferred child bearing. The

problems associated with late

maternal and fetal problems."

motherhood pregnancy include



With increasing educational and socio—economic status, there is a trend towards deferred child bearing. The problems associated with late motherhood pregnancy include maternal and fetal problems.

Firstly there is an increased risk of miscarriage. There is also an increased risk of chromosomal abnormalities. The most common chromosomal abnormality is Down's syndrome, which can be screened for in all pregnant women.

This screening test can be done

looking for the nasal bone. It does not carry any risks to the fetus. This allow mothers the time to make an early choice about the pregnancy should an abnormality be detected. Confirmatory tests for Down's syndrome include amniocentesis which can be performed between 16—20 weeks gestation or the chorionic villus sampling which can be performed from the 11th week. Both confirmatory tests however are associated with a small risk of miscarriage.

Medical conditions like gestational diabetes and hypertension are more common in older mothers. Older mothers may also tend to have more problems in labour. Although childbearing at an advanced maternal age is associated with higher risks to the pregnancy, these risks can be managed with close surveillance during the pregnancy and during the labour period to reduce potential complications. bt



BBS (Singapore), M.Med &G), FAMS

between 11 —13+ weeks of pregnancy via a blood test and ultrasound scan to measure the neck fold thickness and

11 / babytalk issue 4

VAGINAL INFECTIONS

Many women unknowingly suffer in silence. In this article, Dr H.F.Wong share with us his insight into Vulvovaginitis, or commonly known as vaginal infection in women.

THRUSH/FUNGUS

hen doctors say "yeast," we usually mean a fungus named Candida albicans. It's common on the skin and can be found in the gastrointestinal tract anywhere from the mouth to the anus.

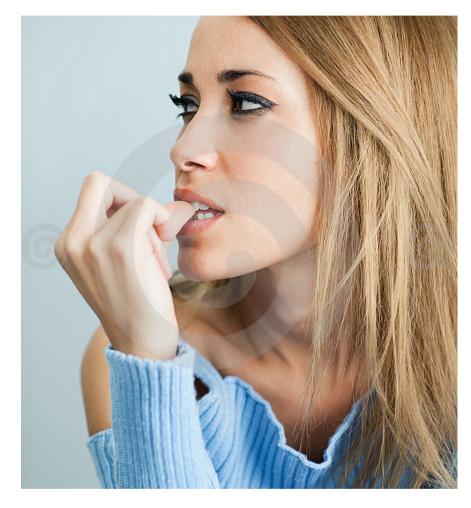
Candida lives harmlessly in the vagina in as many as one in five healthy women of childbearing age without causing any symptoms. Most of the time, a healthy vaginal environment and the normal immune system probably keep the harmless yeast from overgrowing and causing vaginitis. A yeast infection results when there's too much yeast. It overwhelms the vaginal defense system.

Yeast infections produce a spectrum of symptoms. In general, the more intense the itching and redness, the greater the number of yeast organisms present. For some women, secretions predominate, with profuse discharge that sticks to the vaginal wall in thick white patches or white plaques. This is sometimes called vaginal thrush. Odor is not a usual complaint, though candida causes a yeasty smell for some women.

This problem can usually be diagnosed simply with a pelvic examination where the vaginal discharge is swabbed and sent for culture.

Treatment is usually a combination of vaginal pessaries on the market from one to seven days. We usually give a anti—fungal/steroid cream to reduce local itchiness as well. If you have recurrent or persistent fungal infections, these can be a challenge to treat and you would need to see your GP or gynaecologist to confirm the diagnosis and ensure it is not a different condition such as bacterial vaginosis, which is as common as fungal infections.

BACTERIAL VAGINOSIS (BV)



This problem is as common as yeast/ thrush or fungal infection and presents as vaginal discharge (may be yellow green in contrast to white discharge in yeast infection) as well. The difference between fungal infections and BV is that the discharge in BV tends to be foul smelling with a fishy odour and they are the number one cause of funny odours. You can also get some soreness and some irritation around the vulva from it.

Most of the time, we can confirm the diagnosis by obtaining a vaginal swab and sending it off to the laboratory. In the meantime, we usually order some vaginal pessaries or even oral medication for 7 — 10 days to treat the condition. The usual organisms are Gardneralla and Trichomonas infections.

BV is not considered a sexually transmitted infection but rather an imbalance in the bacteria normally found in the vaginal in the same way like a yeast infection. You should see a gynaecologist or GP for treatment.

SEXUALLY TRANSMITTED DISEASE(STD)

There is a whole lot of STD to be described but we shall briefly describe the common ones below.

HERPES INFECTION

Herpes simplex virus (HSV) infections are very common worldwide. HSV—I is the main cause of herpes infections that occur on the mouth and lips, including cold sores and fever blisters. It is transmitted through kissing. HSV—I can also cause genital herpes, however, HSV—2 is the main cause of genital herpes. HSV—2 is contracted through sexual contact. You may be infected with HSV—I or HSV—2 but not show any symptoms. Often symptoms are triggered by exposure to the sun, fever, menstruation, emotional stress, a weakened immune system, or an illness.

There is no cure for herpes, and once you have it, it is likely to recur; however, some people may have one outbreak and then never have another one.

Genital herpes present with multiple painful blisters and ulcers around the vulva and perineum (area immediately next to the vagina) and in serious cases, may having trouble even passing urine because of pain

In many instances, your doctor is able to make the diagnosis of herpes from examining you without additional tests. If your doctor is not 100% certain, however, then he or she may take a sample from the blisters to test for the virus.

Treatment for genital herpes: Antiviral medicines may help shorten the duration of a herpes outbreak and suppress recurring outbreaks. We give oral tablets and topical antiviral cream for I week. Some patients require admission due to the level of pain from the ulcers.

CHLAMYDIAE

Chlamydia is a common sexually transmitted disease (STD) caused by the bacterium, Chlamydia trachomatis, which can damage a woman's reproductive organs. Even though symptoms of chlamydia are usually mild or absent, serious complications that cause irreversible damage, including infertility, can occur "silently" before a woman ever recognizes a problem. Chlamydia also can cause discharge

from the penis of an infected man.

Chlamydia is the most frequently reported bacterial sexually transmitted disease, especially in young girls, in the United States.

Any sexually active person can be infected with chlamydia. The greater the number of sex partners, the greater the risk of infection. Because the cervix (opening to the uterus) of teenage girls and young women is not fully matured and is probably more susceptible to infection, they are at particularly high risk for infection if sexually active.

Chlamydia is known as a "silent" disease because the majority of infected people have no symptoms. If symptoms do occur, they usually appear within I to 3 weeks after exposure.

In women, the bacteria initially infect the cervix and the urethra (urine canal). Women who have symptoms might have an abnormal vaginal discharge or a burning sensation when urinating. If the infection spreads from the cervix to the fallopian tubes (tubes that carry fertilized eggs from the ovaries to the uterus), some women still have no signs or symptoms; others have lower abdominal pain and fever:

In women, untreated infection can spread into the uterus or fallopian tubes and cause pelvic inflammatory disease. This happens in about 10 to 15 percent of women with untreated chlamydiae and may lead to problems later on with fertility.

Chlamydia can be easily treated and cured with antibiotics. A single dose of azithromycin or a week of doxycycline (twice daily) are the most commonly used treatments.

When we discover any STD, contact tracing of the male partner is also needed and all sex partners should be evaluated, tested, and treated.

GONORRHOEA

Gonorrhea is a sexually transmitted disease (STD). Gonorrhea is caused by Neisseria gonorrhoeae, a bacterium that can grow and multiply easily in the warm, moist areas of the reproductive tract.

Any sexually active person can be infected with gonorrhea.

In women, the symptoms of gonorrhea are often mild, but most women who are infected have no symptoms. Even when a woman has symptoms, they can be so non—specific as to be mistaken for a bladder or vaginal infection. The initial symptoms and signs in women include a painful or burning sensation when urinating, increased vaginal discharge, or vaginal bleeding between periods.

Gonorrhoea can lead to pelvic inflammtory disease (PID.) PID can lead to internal abscesses (pus—filled "pockets" that are hard to cure) and long—lasting, chronic pelvic pain. PID can damage the fallopian tubes enough to cause infertility or increase the risk of ectopic pregnancy.

Again, easily diagnosed by taking a vaginal swab. Easily treated with antibiotics. See your gynaecologist for treatment

GENITAL WARTS

Genital warts are usually asymptomatic, but depending on the size and anatomic location, they can be painful or itchy or just embarrassing cauliflower like growths. They usually occur outside the vaginal and anus. Sometimes, they can appear in the vagina and around the cervix

Diagnosis of genital warts is usually clinical, made by visual inspection.

External warts (outside of the vagina) can be treated with a topical cream applied for 3 times/per week for 6—12 weeks. Internal vaginal warts or warts that fail to respond to topical cream may require laser vaporisation, a day surgery procedure done under general anaesthesia.



Dr Wong Heng Fok
Consultant Obstetrician
& Gynaecologist,
Urogynaecologist
MBBS (Singapore),
MRCOG (London, UK)