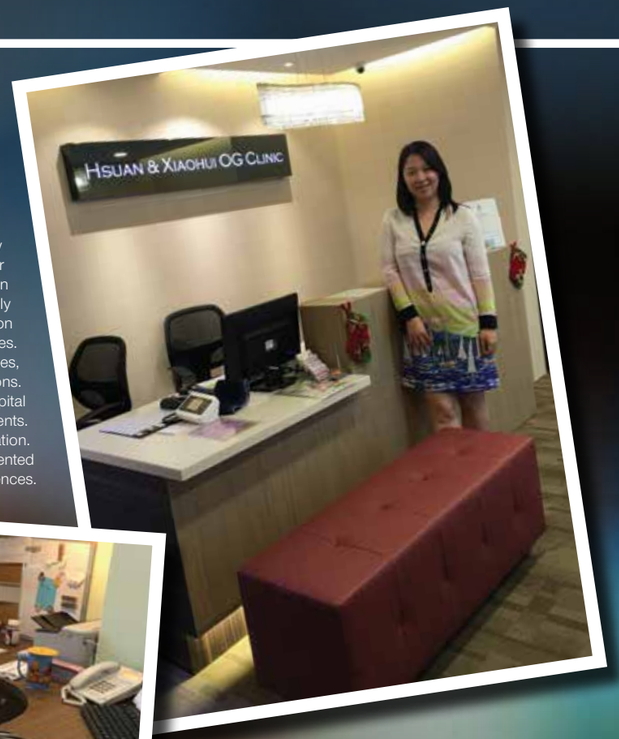

DR CRYSTAL CHIN

Graduated in 2003 from medical school of National University of Singapore, Dr Chin pursued her specialist training locally and she obtained her postgraduate qualification from Royal College of Obstetrics and Gynaecology, United Kingdom in 2008. She is a Fellow of the Royal College of Obstetricians & Gynaecologists (London) and a Fellow of the Academy of Medicine (Singapore). She has a special interest in minimally invasive surgery especially advanced hysteroscopic surgery for which she did her HMDP (human manpower development plan award) in Japan in mid-2014. She is accredited for advanced minimally invasive surgeries. She is familiar with hysteroscopic ligation and has extensive experiences in hysteroscopic myomectomies. She also takes an interest in pre-invasive diseases, for which she obtained colposcopic and laser accreditations. She set up the molar pregnancies unit for KK hospital to better look after the needs of this special group of patients. She is actively involved in clinical research and medical education. She has published on several journals and presented in many international conferences.

Cervical cancer screening updates

Cervical cancer is the third most common malignancy in women worldwide. It has the 8th cancer mortality in Singapore. Early diagnosis and identification of symptoms are keys to the prevention and treatment of cervical cancer. Regular Pap smear remains an important preventive measure. The main aim of Pap smear screening is to prevent morbidity and mortality from cervical cancer. As a healthcare provider, we should also prevent overzealous management of precursor lesions that most likely will regress or disappear and for which the risks of management outweigh the benefits. Being rarely or never screened is the major contributing factor to most cervical cancer death today. Hence, raising public awareness and reaching out to less fortunate groups i.e. women of low socioeconomic status is still of prime importance.

A SPECIALIST'S POINT OF VIEW - **DR CRYSTAL CHIN**

In Singapore, cervical cancer screening begins at age 25. Women less than 25 should not be screened regardless of age of sexual onset as there is minimal benefit and substantial harm in screening below age 25, but it does not apply to special population i.e. history of cervical cancer, diethylstilbestrol (DES) exposure and being immunocompromised. For age 25 to 29, cytology alone should be done every 3 years. Human papilloma virus (HPV) testing should not be used to screen this age group as prevalence of carcinogenic HPV is close to 20% in teens and early 20s. Most HPV infections resolve without intervention. Identifying carcinogenic HPV that will resolve leads to repeated call-back, anxiety, and interventions without benefit.

What would make the biggest difference to survival for those younger women i.e. less than age 25, who develop cervical cancer is for their symptoms to be promptly recognised and treated. If a young woman has symptoms of post coital bleeding or persistent inter-menstrual bleeding, an immediate speculum examination should be offered to enable a clear view of cervix. If the cervix looks abnormal and suspicious, the correct action is urgent referral to accredited colposcopist. If there is a benign lesion such as cervical polyp, a routine gynaecological referral will suffice. If the cervix looks normal, the recommended action will be a pregnancy test and testing for sexually transmitted infections. A screening test would actually be an unnecessary delay in getting specialist treatment. The screening test isn't a cancer test. It just indicates whether further investigations are needed. If a woman has symptoms, we know she requires further investigation – waiting for a screening result would be unnecessary and would simply delay this.

Screening for women ages 30 to 68, co-testing i.e. cytology and HPV testing every 5 years is preferred. Cytology alone every 3 years is acceptable. Co-testing increases detection of prevalent CIN 3 and enhances detection of adenocarcinoma or adenocarcinoma in situ (AIS). It minimizes increased number of colposcopies and thus reduces harms.

Women co-testing HPV positive and cytology negative should be followed with either repeat co- testing in 12 months, or immediate HPV genotype specific testing for HPV 16/18. If either repeat test at 12 months' follow-up is positive, refer to colposcopy. If both tests are negative, return to routine screening. If HPV 16/18 is positive, refer to colposcopy. If HPV 16/18 is negative, repeat co-testing in 12 months and then if either test is positive, refer to colposcopy. If both tests are negative, return to routine screening. (Figure 1)

Screening should be stopped at age 69 locally for women with adequate negative prior screening and no CIN 2+ within the last 20 years. Adequate negative screening means 3 consecutive negative pap smears or 2 consecutive negative HPV tests. The tests are within 10 years of stopping and most recent one is within 5 years. The screening should stop after hysterectomy with removal of cervix and no history of CIN 2+. The risk of Pap smear abnormality after hysterectomy is 1% which is a comparable risk of breast cancer in men for whom screening is not recommended. If there is a positive history of CIN 2, CIN 3 or AIS, routine screening should be continued for 20 years even if this extends beyond age 69.

HPV vaccination is an important way to reduce the risk of cervical cancer as it has been found to be extremely effective in protecting against HPV 16/18 that are responsible for more than 70% of cervical cancer . However, the recommended screening practices should not change on the basis of HPV vaccination.

Figure 1: Pathway for co-testing