Gynaecological Oncology News

Prof. Andreas Obermair **February 2007**

Ovarian Cancer Screening

Results presented at IGCS Conference

I always try to be up-to-date with the latest development in gynaecological cancer and therefore I attend conferences in Australia and overseas. I would like to report about the results of a pivotal clinical trial, which was presented at the last conference of the International Gynaecological Cancer Society (IGCS) in Santa Monica in October 2006.

Two of three patients with ovarian cancer are diagnosed at an advanced stage, resulting in poor outcomes. With an effective screening test ovarian cancer could be detected at an early stage and survival would improve.

In the past, Ultrasound (US) and serum CA-125 have been tested in ovarian cancer screening separately. These trials did not show a survival benefit. The reasons are that at least one third of patients with stage 1 ovarian cancer do not have elevated serum CA-125 but also a number of benign conditions (endometriosis, fibroids, processes in pleura and pericard) may cause elevations in serum CA-125 resulting in false positive screens. US will show large ovarian masses and ascites but may miss small cancers. Hence, there is a need to combine US and CA-125 for ovarian screening.

Data on the definitive ovarian cancer screening trial were presented for the first time by Prof. Ian Jacobs from the University College London Over three years the trial enrolled a total of 200,000 women who were randomly selected from health registries in the U.K.. Women had to be between 50 and 74 years of age. 50,000 women were screened by US, 50,000 women had CA-125 plus US based screening and 100,000 women served as controls with no screening at all. This trial is one of the world's biggest ever clinical trial so far.

Screening algorithm

If the US was normal, or a simple cyst not greater than 60 ml was found, the US was repeated every year. If the volume of the simple cyst was greater than 60 ml or if the cyst was complex with solid components or septae, the US was repeated within 6 to 8 weeks by an experienced sonographer. If that screen was abnormal a referral to a gynaecological oncologist as made.

A newly developed computer software analysed the results of serial CA-125 measurements and combined these with the US findings.

Results - Screening detected both early and late stage cancers but also false positives (positive screening, benign tumour found at surgery). Serum US + CA-125 arm was more accurate in predicting ovarian cancer than US alone. While 19 operations were required to detect one case of ovarian cancer in the US arm, only 4.7 operations were required in the CA-125 arm of the trial. Results on survival will be available in 2014after participants were followed a few years.

Women at high risk

Women with 2 or more first degree blood relatives (mother, sister, daughter) with ovarian or breast cancer diagnosed at young age (<50 years) are at high risk and should be screened. However, the benefits of screening in high-risk women are still unproven.

Management - Genetic testing must be considered. Current options include the oral contraceptive pill (reduces risk of ovarian cancer by 50%), screening or prophylactic surgery (98% risk reduction).

For premenopausal women at high risk I do recommend combined US + CA-125 screening and menopausal women should consider prophylactic surgery as it is the safes option if fertility is not an issue an more.

Funding for LACE Trial

NHMRC and QCF grants secure LACE funding till 2009

The LACE trial (**L**aparoscopic **A**pproach to **C**arcinoma of the **E**ndometrium) is an Australian-wide clinical trial randomizing between laparoscopy and laparotomy for patients with endometrial cancer.

The trial recruits public and private patients from all major hospitals in QLD, NSW, VIC and WA. In QLD the trial is supported by all gynaecological oncologists. Considering that patients who are enrolled into a clinical trial almost always show improved outcomes, I think that

"Currently the LACE trial is the best treatment option for patients with endometrial cancer"

More than 140 patients have been enrolled until now. Patients with a history of a previous cancer had been excluded until now but will be included from 2007.

Please contact me if I can answer questions about this or any other topics raised or if you require advice about a patient.

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