

Gynaecological Oncology News

This issue of Gynaecological Oncology News contains more hot-off-the-press articles than usual because they inform about critically important research that might influence your clinical decision making. As always, please do not hesitate to be in touch to discuss any aspect of the newsletter or a specific patient with me. I can be contacted on the below phone numbers.

Salpingectomy instead of tubal ligation

Emerging research from Canada and the US suggests that more than half of high-grade serous "ovarian cancers" may arise in the Fallopian Tube rather than in the ovary. The aim of this article is to summarise the evidence for my recommendations.

Data presented by surgeon-researchers from the Mayo Clinic at the 2015 Gynecologic Oncology Conference in Chicago, IL suggested that salpingectomy instead of tubal clipping reduced the risk of developing ovarian cancer by 36 per cent.

Molecular evidence from female BRCA carriers suggest that the majority of precancerous lesions mimicking "ovarian" cancer develop in the Fallopian Tube.

The "Campaign for Salpingectomy" driven by the Society of Gynecologic Oncology of Canada aims to reduce ovarian cancer incidence by 40 per cent over the next 20 years by taking two simple steps.

1. Remove Fallopian Tubes at every hysterectomy

Every year 25,000 Australian women will have a hysterectomy for non-cancerous conditions. Assuming a lifetime risk of ovarian cancer of 1.3%, more than 300 of the 1500 women who will be diagnosed with ovarian cancer this year could be spared this life-threatening diagnosis.

2. Remove Fallopian Tubes instead of clipping them for birth control

We know that 10 per cent to 15 per cent of women diagnosed with ovarian cancer had a tubal ligation (clips) previously. Would these patients had had the Fallopian Tubes removed surgically, the vast majority of them could have been spared a critical outcome.



HOW DO WE IDENTIFY LYNCH CARRIERS?

In this day and age, it would be infeasible to test the entire Australian population for Lynch. Instead, we recognise sentinel cancers. For example, a man gets diagnosed with bowel cancer, the tumour will be tested and Lynch syndrome may be diagnosed. As a consequence, all first degree relatives will be offered genetic testing and some of them will be found Lynch-positive. Preventative steps will minimise the cancer risk in Lynch carriers. Relatives who don't have Lynch can be reassured.

Missing to identify sentinel cancers will not only cause harm to the patient herself (subsequent cancers), but also to all first degree relatives who could also claim that they could have known.

WHAT NEEDS TO BE DONE?

My colleagues and I went through the research evidence and concluded that all patients diagnosed with endometrial cancer should have Lynch tissue testing.

The test is an immunohistochemical test automatically performed in the pathology lab on endometrial cancer tissue that is already available. No additional blood or tissue from the patient will need to be requested and the test will be cost free to most patients.

INTERPRETATION OF RESULTS

A positive tissue test is suspicious for Lynch but still no definitive prove. Such a patient needs to be referred to formal genetic testing through a blood test, which I am happy to arrange.

Immunohistochemistry is far from perfect and I accept that sometimes false positive tests may cause anxiety to some patients. However, the risks of missing a patient with Lynch (including the medico-legal risks) would be devastating.

ALL MAJOR PATHOLOGY LABS INVOLVED

The issue is so important that all QLD gynaecological oncologists and all major histopathology providers are in support. You will find this additional information about the Lynch status on all histopathology reports for endometrial cancer under "Mismatch repair deficiency". "Preservation of staining" or "No loss of enzyme activity" indicates the absence of Lynch.

INCIDENTAL FINDING OF ENDOMETRIAL CANCER

Should a general gynaecologist incidentally discover an endometrial cancer during a hysterectomy, this test will also be performed automatically. Should you be involved in such a case, please feel free to be in touch with any gynaecological oncologist or me to discuss whether or not any further diagnosis or treatment needs still to be done.



ARE THERE SIDE EFFECTS FROM SALPINGECTOMY?

Removing Fallopian tubes will have no hormonal consequences as demonstrated in established studies (Morelli et al, Gyn Oncol 2013). The operating time will be slightly longer but there was no increase in bleeding or readmissions.

In my practice it has become routine to offer removal of the Fallopian Tubes at hysterectomy.

New Lynch section on all histopathology reports for endometrial cancer

Lynch syndrome is a familial cancer syndrome responsible for endometrial and bowel cancers. In female carriers of Lynch, endometrial cancer is the most common cancer type. For information on Lynch Syndrome, please go to obermair.info and type "Lynch" into the right hand bottom search field.

The major problem with Lynch is that these cancers often go undetected. If patients don't know they have Lynch they might ...

- Develop avoidable secondary cancers,
- Family members could develop preventable cancers

Recognising a patient with Lynch is a true life saver!

OVARIAN CANCER SCREENING MAY

SAVE LIVES

Patients may approach you for information on the "new" ovarian cancer screening test. Here is the relevant paper summarised in a nutshell.

Ovarian cancer screening is closer to reality after successful results from the world's largest ovarian cancer screening trial have been published in December 2015 (1). The authors of the UK study provided first-ever evidence that ovarian cancer screening may save lives.

The largest ever trial in ovarian cancer screening enrolled 200,000 women from 13 UK centres in one of three screening arms and followed them for 14 years. The first group of women (50,000) received yearly ultrasounds while the second group of 50,000 patients had a ROCA test, which includes a yearly CA125 blood test and a transvaginal ultrasound examination if needed. The third and largest group of 100,000 women had no screening. All women were between 50 and 74 years of age.

The results in a nutshell

- Ovarian cancer was diagnosed in approximately 0.6% of women regardless of the intervention.
- Mortality was 0.30% in both screening groups and 0.34% in the no-screening group.
- Compared to women who had no screening there was an overall reduction in mortality of 11% in women in the ultrasound group and 15% in women in the CA125 group.
- Compared to the no-screening group, ultrasound reduced mortality by 2% in the first 7 years and 21% in the subsequent 7 years.
- Similarly, CA125 reduced mortality by 8% in the first 7 years and 23% in the subsequent 7 years.
- When women who had undiagnosed ovarian cancer at enrolment into the trial were excluded from analysis, the average reduction in mortality was 20% in the CA125 plus ultrasound group. The reduction in mortality was still 8% in the first 7 years but 28% in the subsequent 7 years.
- Overall, only half of ovarian cancers were detected through screening (59% in the CA125 + ultrasound group; 51% in the ultrasound only group). A significant proportion (more than 40%) of ovarian cancers remained undetected.
- ROCA (the new CA125 algorithm based on changes of CA125 over time) detects double as many ovarian cancers than the traditional fixed CA125 (87% vs. 41%).
- For every 10,000 women screened for ovarian cancer, 15 ovarian deaths can be prevented.
- For every woman who had surgery for a suspicious ovarian mass, which turned out to be ovarian cancer, four women had surgery unnecessarily and no sinister pathology was found.

WHY DID PREVIOUS STUDIES FAIL TO DEMONSTRATE A BENEFIT OF OVARIAN CANCER SCREENING?

One American and a Japanese study previously failed to report a benefit of ovarian cancer screening. However, these studies included a smaller number of women in their respective trials. Small differences can easily be missed in small research trials and the UK trial had to enrol more than 200,000 women to show the benefit in the long term follow-up.

HOW DO GYNAECOLOGICAL CANCER EXPERTS AROUND THE WORLD INTERPRET THE RESULTS?

The instant response of many colleagues around the world is that the results from last week's article are promising and revolutionary because for the very first time in history a benefit of ovarian cancer screening could be demonstrated. However, the benefits appear small and it still remains unclear what groups of women will benefit.

Further analysis needs to be undertaken to evaluate why 4 of 10 women with proven ovarian cancer returned normal screening tests. Therefore, most colleagues feel that the problem "ovarian cancer" is not resolved as yet.

THE ROCA TEST

The ROCA test includes an algorithm that measures serum CA125 changes over time rather than using a traditional fixed serum CA125 cut-off of 35 U/ml. It is licensed to Abcodia Ltd, a UK-based company and is already used in the U.K. by private clinics and in 5 states in the United States. It will become available in additional U.S. states throughout 2016. Australia is not mentioned in the paper.

The ROCA Test uses information obtained through large-scale research about a woman's age, menopausal status and serial blood CA125 measurements to assess the likelihood that a woman has ovarian cancer. It is the first step in a multimodal assessment for ovarian cancer and will inform a gynaecologist about the woman's risk of having ovarian cancer.

[1] Jacobs IJ et al.: Ovarian cancer screening and mortality in the UK Collaborative Trial of Ovarian Cancer Screening (UKCTOCS): a randomised controlled trial. *The Lancet*, 17 December 2015 (open access).

Please do not hesitate to give me a call if you wish to discuss an aspect of the above or a specific patient with me.

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