

Gynaecological Oncology News

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Familial Gynaecologic Cancer

Asking for family history can be life-saving

Ovarian and uterine cancer can be linked to inherited germline mutations. These cancers would occur in family clusters and typically develop at an earlier age than expected.

Lynch syndrome in females causes uterine cancer (life time risk 50% to 60%) more frequently than bowel cancer (40%). Also, the risk of ovarian cancer is approximately 10%, which is 8-times the risk compared to the normal population. We estimate that the risk of underlying Lynch syndrome in women who are diagnosed with uterine cancer at age 50 years or younger is as high as 20%. A suspicious family history will point to a possible germline mutation in approximately half of patients with Lynch.

Typically, a patient (male or female) will have surgery for colon cancer and a diagnosis of Lynch (also known as HNPCC) is made through histopathology. Such a finding should trigger a series of investigations:

Lynch syndrome (HNPCC) causes uterine cancer more often than bowel cancer

Take a family history

Offer genetic counseling and/or genetic testing

- Women within their reproductive years should be offered screening, even if the data available show no benefit. Screening should address the risk of ovarian cancer (TVUS, CA125), uterine cancer (Pipelle) and other cancers (colon, stomach, bladder & renal tract).
- Women not concerned about reproduction or menopausal status should be offered prophylactic surgery, which includes a full hysterectomy and bilateral salpingo-oophorectomy (BSO). Laparoscopic surgery should be performed as it is the least invasive surgical method and allows patients to recover quicker than through a laparotomy.

According to the most recent literature, prophylactic hysterectomy prevents 100% from developing uterine cancer but prophylactic BSO is associated

with a 4.7% risk to find an occult (microscopic) cancer at the time of (prophylactic) surgery and a 5% risk of developing primary peritoneal cancer subsequently.

Lymphoedema Study

World's largest study on lymphoedema in QLD

Cancer Australia made \$600,000 available over three years to study the incidence of lower limb lymphoedema (LLL) in patients who need to have pelvic surgery for gynaecological cancer.

Causes - The incidence of LLL and its causes are largely unclear. The most likely cause is a lymph node resection required at pelvic surgery for gynaecological cancer. LLL can develop shortly after surgery but cases where lymphoedema developed years after surgery are also known. Little information is available why some patients develop LLL and others are not affected.

LLL Study - The trial will recruit public and private patients from all major hospitals treating patients for gynaecological cancer. The study has been made possible through a collaboration of University of Queensland and the Queensland University of Technology. It will aim to identify risk factors for LLL. The current study will also investigate a new method to diagnose LLL before the onset of symptoms. We hope that an early diagnosis will make treatment of this symptom more successful.

BRCA1 and BRCA2 cause breast (80% life time risk) and ovarian cancer (40% life time risk). The risk for both is negligible before the age of 35 years (BRCA1) or 40 years (BRCA2) of age. After 35 or 40 years of age, prophylactic BSO with or without a hysterectomy is recommended.

A recent article in JCO reports on the risk reduction for women with BRCA1 and BRCA2 gene mutations who have their ovaries removed. Women with BRCA2 mutations who had their ovaries removed reduced their risk of breast cancer by 72 percent, while women with BRCA1 mutations reduced their risk by 39 percent. The study also found that women with BRCA1 mutations who had their ovaries removed reduced their risk of ovarian cancer by 85 percent.

A patient support group for Hereditary Breast and Ovarian Cancer (HBOC) was formed last year. Loryn Einstein coordinates the group and can be contacted via email on HBOCsupport@aol.com or mobile 0421 056 741

Please contact me if I can answer questions about the topics raised above or if you require advice about a patient.

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