Ovarian cancer
Introduction

- Who am I?
- What is a Gynaecological Oncologist?
MDT 1- Multi Disciplinary Tumour Board
MDT 2 Multi Disciplinary Team Ward

- Gynaecology Specialist
- Pharmacist
- Physiotherapist and Occupational Therapist
- Gynaecology Ward Nurse
- Social Worker
- Chaplain

March 2018

Christchurch Gynacological Cancer
The team cont ..... 

- Teamwork and Communication  
- gynaecology  
- colposcopy  
- oncology  
- community practice  
- district  
- palliative  
- Residential
International Agency for Research on Cancer

Male
- Australia/New Zealand
- Northern America
- Western Europe
- Northern Europe

More developed regions
- Southern Europe
- Central and Eastern Europe
- Polynesia
- South America
- Eastern Asia
- Caribbean
- Southern Africa
- World
- Micronesia
- Western Asia
- Melanesia

Less developed regions
- South-Eastern Asia
- Eastern Africa
- Central America
- Northern Africa
- Middle Africa
- South-Central Asia
- Western Africa

Female

Incidence
Mortality

GLOBOCAN 2012 (IARC)
Types of Ovarian Cancer
290 cases. 178 deaths annually NZ

- Epithelial
  - Serous
    - Low grade/high grade
  - Endometrioid
  - Mucinous
  - Clear cell
A Story
History

• Gynae hx Nulliparous
  • Smears NAD
• Laparoscopic myomectomy 6 months prior
  • U/S 2 months prior – NAD
• Personal Hx Breast cancer 5 years ago
• Known BRCA 1– Declined BSO – Not offered salpingectomy. Not offered egg storage
  • Desperate to retain her fertility
FACTS Epithelial ovarian Cancer

• Average stage at presentation 3c
• Average survival at 5 years appx 30%
• Screening using current methods – doesn’t work
• 18-22% BRCA related – even with no family history
Biopsy results
Two types of Epithelial Ovarian Cancer

- Type One – Arises from ovary; clear cell, endometriod, (? Related to retrograde menstruation)
- Type Two – Arise from Fallopian tube. High grade serous cancer
Origins of High grade serous ovarian cancer
Fallopian tubes...
Genetics of EOC
Basic Gynaecological Genetics

BRCA 1 and 2
- Tumour suppressor genes
- Repair damaged pathways
- Autosomal dominant
- Different variant confer different risks

Lynch/ HNPCC
- Autosomal dominant
- Mismatch repair genes
- Abnormality in MLH, MSH loci

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Implications of carrying a BRCA gene

• BRCA 1 risk starts age 40. Affects tubes and ovaries. 40 – 60 % lifetime risk.

• Risk of breast cancer 50 – 65 %. Tumours tend to be HR negative.

• BRCA 2 risk starts age 50. 20 – 40 % lifetime risk.

• Risk of breast cancer 40- 57%. Tumours tend to be HR positive

• No increase endometrial cancer risk

• Small chance primary peritoneal cancer 1- 3 %
Implications of carrying a BRCA gene

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Probability of survival with BRCA 1 and a range of interventions

JCO 2010 Kurian et al

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What does this tell us?

- Knowledge is good
- Intervention can save lives
- Referral to genetics early
- Meet Gynae Oncologist
- Meet breast surgeon
- Consider OCP
  - (TRACEBACK)

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BRCA status – Gift of Knowledge

- Family knowledge
- Prophylactic surgery
- Improved outcomes
- Targeted therapeutic agents
PARP Inhibitors
Return to the story

- Should she been diagnosed earlier?
- Normal – “screening scan” 2 months prior
- Vague symptoms 4 weeks
Presentation

- Usually when the disease spread
- Symptoms of bloating
- Abdominal distension
- Nausea
- Rarely a mass
Diagnosis

- Symptoms
- Blood tests
  - Ca125
- Imaging ultrasound then CT
- Biopsy
Management

- The only cancer where role for surgery literally cutting through and removing most of the disease “debulking” improves outcome
- Aim – no macroscopic residual disease
- Massive international debate – op front surgery vs neoadjuvant chemotherapy
- Neo adjuvant chemotherapy shrink tumour fiirst
- Is it as good ???
- Second RCT which we were part of suggests it is ...
Outcome

- 80% present stage 3 or 4
- 75% respond to chemotherapy initially
- Majority relapse
- Stage 1 disease 80-90% survival
- Stage 3 or 4 disease 30% 5 year survival
The silent killer
Lady pre holiday scan

Dictation date: 2017-09-14
Clinical Indications:
Asymptomatic, requests scan

Right ovary: 6 x 12 x 25mm, volume 1cc. Normal appearance and size. Atollicular.
Left ovary: Size: 13 x 20 x 22mm, volume 3cc. 31 x 17 x 25mm heterogeneous mass in the left adnexa? Ovarian or related to left ovary. Vascularity noted within.

No free fluid visualised.

Conclusion:
Left adnexal mass. Relationship to the ovary could not be determined with certainty. Specialist review and further imaging advised.

Diagnosis:
1) Uterus, tubes and ovaries including sigmoid colon: High grade serous carcinoma of presumed left fallopian tube origin, FIGO stage 3
2) Left pelvic nodes: Metastatic carcinoma, 1/1
3) Left para-aortic node: Metastatic carcinoma, 3/3
4) Omentum: No evidence of malignancy
5) Peritoneal left pelvic side: No evidence of malignancy
Mrs H

Fit and well
Nurse
MVA
Whiplash injury

Blenheim Nurses Conference
2018
Mrs H

Fit and well retired nurse
MVA
Whiplash injury
CT
Ca125
Surgery

Chemotherapy
Screening and diagnosis of ovarian cancer
Screening Programmes

A strategy used in a population to identify a disease with no symptoms or signs
Screening Programmes
Ovarian Cancer - should we screen?

1. The condition being screened for should be an important health problem **YES**
2. Treatment at an early stage is of more benefit than at a later stage **YES**

3. There should be a detectable early stage **NO**
4. **Natural history of the condition is be well understood**

5. A suitable test needed to detect the early stage **Good Idea**

6. The test should be acceptable
7. Intervals for repeating the test should be determined
8. Adequate health service provision should be made for the extra workload
9. The risks, both physical and psychological, are less than the benefits
10. The costs should be balanced against the benefits
Screening for ovarian cancer doesn’t work – ask Ian Jacobs UK CTOCS

- Control- NO Screening
- USS Screening Group- annual TV USS
- Multimodal Screening Group- Ca 125 +/- USS
- 50,000 women in each arm
Conclusion

- no reduction in mortality after the initial years of screening
- No evidence to support screening low-risk women for ovarian cancer
- Estimated that 641 women would need to be screened annually for 14 years to prevent one death from ovarian cancer.
Leaky home health cost put at $26m

Honky-tonky kind of tale a runaway success

Parents watch boy writhe in pain as doctor botches circumcision
The Press
Earthquake
Christchurch, New Zealand
22 February 2011

Plus DVD with Quake footage including the Memorial Service documentary

Proceeds of this book go to Earthquake Recovery
54 year old- well routine smear

- Abnormal cells on smear
- Normal colposcopy
- Normal US
- Ca 125 12 (Normal)

- Hysterectomy and appendicectomy

- Stage 3 disease
Controversies

- Many!
- Screening
- Neo adjuvant chemo or up front OT
- IP chemotherapy/ Heated IP?
- BRCA testing on all ovarian cancers
- Recurrent disease operate or more chemotherapy
Finally

• Many HGSOC start in the fallopian tubes

• Genetic testing and timely referral can save lives

• Ovarian cancer screening doesn’t work

• Research is fundamental to progressing our knowledge

• Thank you to all the amazing women I help to look after,

10,257 colourful stripes which represent the four nucleotides of the BRCA2 gene.
In the end ..

- Primary Surgery including TAH.
- IP chemotherapy
- 41/2 years later still well