

Strategies For The Prevention of Ovarian Cancer

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Justification for Prevention Strategies for Ovarian Cancer

- 70%+ of epithelial ovarian cancer patients present with advanced disease (stages III/IV)
- Although survival can be substantially prolonged with current management, only a minority of patients are cured
- To date, ovarian cancer screening strategies have not been proven to be effective in detecting early stage disease

Prevention Strategies

- “LOW RISK” – no family history
- “HIGH RISK” –
- “positive” family history
- documented genetic abnormalities (BRCA-1; BRCA-2)

Non-Surgical Strategies to Prevent Ovarian Cancer

- Pregnancy- Single pregnancy 20-40% risk reduction; each additional pregnancy 10-15% additional decrease in relative risk
- Oral contraceptives - 40% risk reduction; greatest reduction with 4-6 years of use; persists several years after discontinuation (relevant for both Low and High risk individuals)

Non-Surgical Strategies to Prevent Ovarian Cancer

- Non-steroidal anti-inflammatory agents (includes aspirin; indomethacin; acetaminophen)
- Aspirin: 25% reduction in risk for women taking at least weekly for > 6 months
- Acetaminophen: 40-60% reduced risk

Surgical Strategies to Prevent Ovarian Cancer

- Tubal ligation (7 case control or cohort studies)
- 50-70% risk reduction
- Benefits observed in both Low and High risk populations

Surgical Strategies to Prevent Ovarian Cancer

- Incidental oophorectomy - in association with *any abdominal/pelvic surgery* being performed in a *post-menopausal woman* (e.g., the “incidental appendectomy”)
- Low morbidity procedure in this setting
- Reduction in risk of ovarian cancer within the population, but ill-defined benefit for an individual

Surgical Strategies to Prevent Ovarian Cancer

- Bilateral prophylactic oophorectomy
- High risk – family history/genetic
- 90% reduced risk (< 10-year follow-up)
- Currently, undefined risk for subsequent development of *primary peritoneal cancer*
- Surgical menopause
- Possible increased risk of non-cancer related death