OVARIAN CANCER: SCIENCE & TECHNOLOGY

NEWS: Understanding ovarian cancer: its causes, symptoms, and screening methods

WHAT'S IN THE NEWS?

Ovarian Cancer Awareness Month - September

Ovarian Cancer:

• **Definition:** Cancer that begins in the ovaries, which produce eggs in females. It involves rapid cell growth that can invade and destroy healthy tissue.

Subtypes:

- Type I Tumours: Less common, typically diagnosed early, better prognosis.
- Type II Tumours: More common, aggressive, usually diagnosed at an advanced stage, and cause most deaths.

Symptoms:

- Vague Symptoms: Bloating, pelvic/abdominal pain, loss of appetite, feeling full quickly, frequent urination.
- Other Signs: Indigestion, constipation, back pain, persistent fatigue, weight loss.
- "Silent Killer": Symptoms are often mistaken for common ailments, leading to late diagnosis and poor prognosis.

Causes:

- Genetic Factors:
 - Most heritable cancer.
 - 65-85% of hereditary cases involve BRCA1 or BRCA2 mutations.
 - BRCA1 mutation increases risk up to 50%, BRCA2 mutation around 15%.
- Endometriosis: Increases risk of certain ovarian cancers.
- Lifestyle Factors:
 - Talcum powder (historically linked to asbestos, a carcinogen).
 - Chemical hair products (may release formaldehyde, a carcinogen).
 - Hormone Replacement Therapy (HRT) linked to higher risk.

Screening:

- **No Effective Screening Tests:** CA125 blood test is used for monitoring but is less effective for screening asymptomatic women due to false positives.
- **Importance of Awareness:** Understanding risk factors and symptoms is crucial due to the lack of reliable screening tools.

Genetic Counselling:

- **Purpose:** Helps individuals understand the medical, psychological, and familial implications of genetic contributions to ovarian cancer.
- Use: Valuable for women with a family history of ovarian cancer to identify risk and guide preventive measures.

Indian Scenario:

- Prevalence: Ovarian cancer is among the top three cancers in India, contributing to 6% of all women's cancers.
- Statistics (2022): 47,333 new cases and 32,978 deaths.



Source: https://epaper.thehindu.com/ccidist-ws/th/th-delhi/issues/98886/OPS/GHNDAFSK4.1+G5QDAI2L2.1.html