NEW INSIGHT INTO THE PATHOPHYSIOLOGY OF OVARIAN CANCER: THE ROLE OF THE FALLOPIAN TUBE AND ENDOMETRIOSIS

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The purpose of this talk is to present the latest information on the pathophysiology of ovarian cancer and its significance for ovarian cancer screening and prevention. A new paradigm for ovarian cancer pathogenesis proposes two distinct molecular profiles and pathways for epithelial ovarian cancers. Recent evidence suggests that the majority of high-grade serous tumors arise from the fimbriated end of the fallopian tube, while low-grade, clear cell and endometrioid carcinomas arise either from borderline serous tumors or endometriosis. The advantages of bilateral salpingectomy at the time of hysterectomy or other pelvic surgeries in patients who do not desire fertility will be discussed.

Laparoscopic and Robotic Cytoreductive Surgery for Advanced Ovarian Cancer

The purpose of this talk is to discuss the role of laparoscopy and robotics in advanced ovarian cancer, including:

i.) Second look assessment after primary cytoreductive surgery and chemotherapy

ii.) Triage for operability, including
   a. Confirming mullerian malignancy
   b. Capability of performing optimal cytoreductive surgery to the extent of no visible gross disease or initiating neoadjuvant chemotherapy
   c. Patient selection for cytoreductive surgery either by laproscopy or by laparatomy

iii.) Techniques for laparoscopic and robotic cytoreductive surgery for recurrent and primary advanced ovarian cancer

Endometriosis and Ovarian Cancer: The Link

This talk presents evidence of the association of endometriosis and subsequent carcinoma of the ovary as seen in observational and in vitro studies. Prevalence studies show that specific subtypes of ovarian cancer predominate in certain women. This has been validated in pathogenetic, genomic, immunological and hormonal studies. Taken together, this data provides a strong rational for identifying, monitoring, and treating women with endometriosis at highest risk for cancer conversion. Possible prevention strategies, diagnostic imaging and treatment modalities will be discussed. Although the chance of malignant transformation of endometriosis is low, understanding of this link offers a possibility for prevention and early intervention.