



A CASE OF POST HYSTERECTOMY HUGE MUCINOUS OVARIAN TUMOUR

Gynaecology

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ABSTRACT

Hysterectomy is the most common non-obstetrical surgical procedure among women.

An unresolved concern with hysterectomy is whether it increases risk for early menopause. More than half of all hysterectomies are performed on women younger than age 44, with the highest rates among women aged 40 to 44 years. The majority of women having pre-menopausal hysterectomies retain at least one ovary because of evidence that the physical and psychological benefits derived from keeping the ovaries outweigh the possibility of ovarian pathology, including cancer. Of women aged 50–54 years who underwent a hysterectomy, 78% also had a synchronous bilateral salpingo-oophorectomy (BSO). We have reported a case of huge ovarian tumour post vaginal hysterectomy done for uterine prolapse.

KEYWORDS

Post Hysterectomy, Ovarian Tumor, Mass Abdomen

INTRODUCTION

Advances are needed in the prevention of epithelial ovarian cancer, the most lethal gynecologic cancer. [1,2] Prophylactic salpingo-oophorectomy after completion of childbearing in women with BRCA1/2 mutations can significantly decrease the risk of ovarian cancer.(3)

Recent advances in diagnosing ovarian cancer in gynecological malignancies have significantly reduced mortality in women population. However, prophylactic salpingo oophorectomy in patients undergoing hysterectomy in premenopausal age group has been unclear. The rates of ovarian cancer were lowest among those who underwent a synchronous bilateral salpingo-oophorectomy during hysterectomy.

CASE DETAILS

A case of 68 yrs old female came with complaints of mass abdomen for the past 6 months, associated with pain, H/o vaginal hysterectomy done 6 yrs back for uterine prolapse

- Not a known case of DM/HT
- No h/o loss of appetite
- No h/o of loss of weight
- Bowel and bladder habits normal

ON EXAMINATION

Patient general condition fair

P/A – mass extending from symphysis pubis upto xiphisternum corresponding to 36 wks uterine size, firm in consistency, no ascites, no fluid thrill. Skin appears normal. No dilated veins, no murmur on auscultation

CA 125 VALUE - 34

MRI ABDOMEN AND PELVIS

A Mass of size 26cmx20cmx20 cm with loculations and mucinous material arising from ovary probable of BENIGN MUCINOUS OVARIAN TUMOUR. Ovaries cannot be delineated separately.



Patient proceeded with laparotomy. On entering into abdomen a mucinous and loculated mass of size 26 x 20x20 cm arising from left ovary. Mucinous material of about 2 to 3 litres aspirated. Rest of the firm mass clamped, ligated and cut. Right ovarian ligament clamped, ligated and cut. Right ovary removed.

After perfect hemostasis abdomen wound sutured in layers.

Histopathology of the specimen showed

BENIGN MUCINOUS OVARIAN TUMOUR



Before



After

PATHOPHYSIOLOGY

Ovarian cancer forms when errors in normal ovarian cell growth occur. Mucinous adenocarcinomas make up 5–10% of epithelial ovarian cancers.(4) Histologically, they are similar to intestinal or cervical adenocarcinomas, and are often actually metastases of appendiceal or colon cancers. Advanced mucinous adenocarcinomas have a poor prognosis, generally worse than serous tumors, and are often resistant to platinum chemotherapy, though they are rare.

Overall, the most common gene mutations in ovarian cancer occur in

NF1, *BRCA1*, *BRCA2*, and *CDK12*. Type I ovarian cancers, which tend to be less aggressive, tend to have microsatellite instability in several genes, including both oncogenes (most notably *BRAF* and *KRAS*) and tumor suppressors (most notably *PTEN*).⁽⁵⁾ The most common mutations in Type I cancers are *KRAS*, *BRAF*, *ERBB2*, *PTEN*, *PIK3CA*, and *ARID1A*. Type II cancers, the more aggressive type, have different genes mutated, including *p53*, *BRCA1*, and *BRCA2*.⁽¹⁾

MANAGEMENT

- The gold standard for the treatment of any suspected ovarian mass includes intact removal of the involved adnexa with intraoperative pathology evaluation.
- Since most mucinous tumors of the ovary are large, most surgeons will perform an exploratory laparotomy with removal of the involved adnexa.
- If the patient is post-menopausal, a total hysterectomy and bilateral salpingo-oophorectomy may be considered regardless of the histology. However, many patients are premenopausal, and the unilateral nature of most mucinous tumors, whether benign, borderline, or invasive primary ovarian cancers, allow fertility preservation with conservation of the normal appearing uterus and contralateral ovary in apparent early stage disease
- Benign mucinous ovarian cystadenomas are by definition confined to the ovary, and no further procedure is required.
- The abdomen and pelvis should be meticulously explored and any abnormal area should be noted.
- If the tumor appears to be widespread, the surgeon should determine whether the disseminated disease is resectable, either to a level of less than one centimeter - historically considered "optimal" - or preferably to no gross residual disease left at the completion of surgery.
- If this is possible, then every effort should be made for maximal debulking surgery; widespread disease does mandate removal of the contralateral ovary and the uterus.
- If total gross surgical resection is not possible, then consideration should be given to alleviating patient symptoms, e.g., bowel resection for an impending obstruction, and stopping the procedure in favor of chemotherapy

DISCUSSION

BSO is routinely offered concomitant with hysterectomy as a prophylactic procedure to prevent ovarian cancer and additional surgery for benign ovarian masses, and as treatment for pelvic pain, premenstrual syndrome, and symptomatic endometriosis[7][8]

However, after menopause, the ovary continues to produce androstenedione and testosterone in significant amounts and these androgens are converted in fat, muscle, and skin into estrone. Evidence suggests that oophorectomy increases the subsequent risk of coronary heart disease (CHD) and osteoporosis and whereas 14,000 women die of ovarian cancer every year nearly 490,000 women die of heart disease and 48,000 women die within 1 year after hip fracture. Cochrane database were used to identify studies that examined the incidence of disease and mortality from 5 conditions that seem to be related to ovarian hormones: CHD, ovarian cancer, breast cancer, stroke and hip fracture, and also data for death from all other causes.

Of women aged 50–54 years who underwent a hysterectomy, 78% also had a synchronous bilateral salpingo-oophorectomy (BSO)[6]

CONCLUSION

Mucinous ovarian tumors represent a distinct histologic entity. They differ significantly from other types of epithelial ovarian cancers in their pathogenesis, pathologic characteristics, molecular signature, and clinical behavior. These differences have established the need for innovative treatment approaches to achieve improved patient outcomes.

The role of prophylactic bilateral salpingo-oophorectomy in preventing ovarian cancer based on the level of risk of the patient. For women at average risk of ovarian cancer who are undergoing a hysterectomy for benign conditions, the decision to perform prophylactic bilateral salpingo-oophorectomy should be individualized after appropriate informed consent, including a careful analysis of personal risk factors.

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