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Dr. Renu Singh

Junior Resident, Department of OBGY, GMCH, Nagpur, Maharashtra, India

Dr Manjushree Waiker

Professor, Department of OBGY, GMCH, Nagpur, Maharashtra, India

CA ovary masquerading as CA cervix

Dr. Renu Singh and Dr. Manjushree Waiker

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Abstract

Ovarian malignancy forms the most common gynaecological cancer causing deaths in world and second most common gynaecological malignancy, first being the ca cervix. The presentation of the two are different and also differ in the symptoms and the age of occurrence. Yet tertiary care centres witness patients with atypical and rare features that pose a delimma as to which is the primary malignancy. This case deals with a case presenting with an adenexal mass with ascitis along with a growth evident in the per speculum examination. Heading with our further evaluation, tumour markers and imaging by CT scan and ruling out the various possibilities like synchronous malignancy, primary peritoneal malignancy or a metastasis we reached at a conclusion of a primary ovarian malignancy under the facade of cervical malignancy.

Keywords: Ovarian malignancy, synchronous malignancy, cervical malignancy, Krukenberg's tumour, pouch of Douglas malignancy

Introduction

Ovarian cancer is the 3rd most common gynaecological malignancy in India after cervical cancer and breast cancer. Has a high mortality and mostly occurs at the age of 63yr with maximum number of cases being reported at 45-54yr according to the national cancer registry. Over 90% are of epithelial origin.

Presentation can be very vague and hence it does not lend itself to early diagnosis.75% are diagnosed at an advanced stage. Early disease presents with abdominal pain,

bloating, indigestion, urinary frequency and constipation. An adnexal mass can raise suspicion of ovarian pathology and hence should be aggressively examined and treated. Absence of any preinvasive lesion and late presentation make it difficult to diagnose at an early stage. Apart from this usual presentation of ascitis and abdominal distension unusual presentations have also been reported. In this case report we will discuss an unusual presentation of a case of ca ovary masquerading as a case of Ca cervix.

Case Report

63yrs old female P3L3 referred as a diagnosed case of Ca ovary with gross ascitis came with complaints of lump in abdomen followed by abdominal distension, loss of appetite and constipation.

Examination revealed a thin built cachexic in woman with normal vitals, abdominal distension with gross ascitis. Breast were atrophic and no palpable lymadenopathy could be appreciated. Per speculum examination showed presence of an irregular growth on the lower lip of cervix with minimal bleeding. Per vaginal examination findings included a friable growth involving the lower lip of cervix that bleeds on touch and bilateral forniceal fullness. Uterus size could not be appreciated due to the tense abdomen. Per rectal examination was suggestive of nodularities in pouch of douglas with intact mucosa. With these findings, a provisional diagnosis of ovarian neoplasm with concurrent cervical neoplasm was made.

To confirm diagnosis we proceeded with the following investigations: •CA125 with raised value of 209 and ultrasonography of (A+P) findings were suggestive of a round to oval hetrogenous, hypoechoeic solid, cystic mass in the right adnexa with internal vascularity. No calcification, no septations,? neoplastic etiology.

In order to look for the organ involvement and extent of spread contrast enhanced CT scan was done with findings of a solid cystic lesion of right ovary of size- 7.1*12.1*10.2cm with loss of fat planes with bladder and uterus, with normal uterus and cervix.

Corresponding Author:
Dr. Renu Singh
Junior Resident, Department of
OBGY, GMCH, Nagpur,
Maharashtra, India

Liver and splenic infarcts present s/o ovarian neoplasm. No involvement of stomach or esophageal lining.

Tissue diagnosis was done by USG guided FNAC that revealed high grade epithelial malignancy of epithelial origin, adenocarcinoma. The histopathology report of the biopsy sample sent from the growth also revealed adenocarcinoma. This was in conjunction with our provisional diagnosis. This raised a suspicion, as both tumours of similar histology are rare. Also we faced the challenge of recognising the primary and opting for appropriate treatment modality. Hence MRI was planned suspecting that it could be an endometrial tumor that was metastasising to both ovary and cervix.



Fig 1: is an image of MRI pelvis

- MRI PELVIS images as shown below were pointing towards
- Right adnexal mass with with enhancing soft tissue deposits in the rectouterine pouch invading the cervical serosa and uterine myometrium with normal mucosal lining of the endometrium. This created a diagnostic dilemma as the imaging studies reported normal cervical and uterus lining.

Then why growth over the cervix? And how does HPE report suggests malignancy. Review evaluations of the histology slides revealed similar findings. Hence, a reevaluation from the beginning was sought with first step of direct visualisation under magnification, colposcopy was done and images are as shown:



Fig 2: These images show normal cervical lips with slight erosion and growth seen beneath the lower lip that in the dim light and presence of bleeding at night mimicked as growth arising from the posterior lip. Endocervical lining was normal.

Further with this colposcopic guided biopsy of endocervix and ectocervix was taken and resorting was conclusive of no malignant pathology.

Thus keeping the rare possibilities aside our final diagnosis of Ca ovary was made.

Discussion

Ovarian cancers account for 3-4% cancers in women and mostly prevalent in the post-menopausal age group (65-74yr), mostly of epithelial origin. The major risk factors include family history, ethnicity and reproduction.

Family history is the strongest risk factor with a relative risk of

- 3.6 Three family history ovarian cancer syndromes have been identified
- 1. site specific ovarian cancer syndrome
- 2. hereditary breast and ovarian cancer syndrome
- 3. HNPCC- hereditary non polyposis colorectal cancer. Ethnicity pattern resembles predominance in white women due to more intake of fat and meat.

Reproductive factors including nulliparity, late menopause, patients with prolonged, uninterrupted ovulation due to recurrent inflammation in the ovarian epithelium. While lactation, multiparty, tubal ligation are few protective factors. Ovarian

cancers can be divided into 3 major categories based on cell type origin ie epithelial, germ cell tumours and sex cord tumours. Ovary may also be site of metastatic disease from other organ sites mainly GI tract.

Ovarian tumour spread can occur through

- 1. Direct extension and exfoliation of cells into the peritoneal cavity
- 2. Via lymphatic route to regional and paraaortic lymph nodes
- 3. Hematogenous dissemination.

Exfoliation of tumour cells is the earliest mode of spread. These cells follow the circulation of peritoneal fluid along the surface of pelvic and mesenteric peritoneum. They are also carried cephalad in the paracolic spaces to the omentum and undersurface of diaphragm. Spread to the right lung occurs via the trans diaphragmatic lymphatics producing a right pleural effusion. Surface spread to the peritoneal surface of bowel and bladder are common findings in the advanced stage. However, involvement of bowel lumen or bladder mucosa is rare. The diaphragm is a common site of disease. Lymphatic drainage spreads laterally through the broad ligament and to the pelvic lymph nodes. Retrograde spread via the round ligament lymphatics to reach the inguinal lymph nodes.

Ovarian vein path of the lymphatics is responsible for para aortic spread. Hematogenous spread is rare.

Postmenopausal women with raised CA-125, ascitis, fixed or nodular pelvic mass, abdominal distension and presence of family history forms a criteria for transfer of these patients to a higher tertiary care centre to adequately stage and plan treatment.

Our case first created an impression of dual malignancy. Henceforth, concurrent malignancies with two primary sites can also occur called synchronous malignancies. These should be histologically discrete and separated from each other by means of healthy tissue as basal lamina or stroma.

Most commonly reported are ca endometrium with ca ovary. Pathogenesis may be that mullerian tissue with similar embryological origin may respond as a single structural entity when simultaneously exposed to carcinogenic, hormonal or other triggering factors.

Criteria's to distinguish between synchronous and metastatic foci include one major criteria and few minor criteria's.

Major criteria says that the two tumours should be histologically distinct. Minor criteria's are

- a. Limited to primary location
- b. Absence of direct extension between the neoplasm.
- c. Absence of lymphovascular invasion
- d. Abscence of distant metastasis.

Synchronous primaries have a better prognosis than metastasis. Pouch of douglas also known as the rectouterine pouch or posterior cul-de-sac is bordered anteriorly by the post uterus and posteriorly by the rectosigmoid colon. POD is named after Scottish anatomist James Douglas and is the most dependent portion and thus is a common location for fluid, abscess and drop metastasis.

It is lined by the peritoneum which originates from the remnants of the mullerian system that does not participate in organogenesis. Primary in POD are rare.

Due to common embryology, lesions mimicking mullerian malignancy can develop in POD. 2nd mechanism of primary pouch of douglas malignancy is malignant transformation of endometriosis.

Mullerian type of POD malignancies include adenosarcoma, carcinosarcoma, clear cell adenocarcinoma and papillary serous cell carcinoma.

Our case could include various differentials like synchronous primary ovarian and cervical cancer, primary ovarian or cervical cancer with metastasis into the other tissue and primary carcinoma of pouch of douglas. And also a triple synchronous malignancy involving endometrium, ovary and cervix and lastly a primary endometrial malignancy metastasising to the ovary and cervix

As patient presented with typical signs and symptoms of ovarian tumour our primary diagnosis points towards Ca ovary.

Ca cervix was ruled out as colposcopic examination showed normal cervix. MRI done showed a normal endometrial lining with a mass invading the serosa posteriorly thus ruling out triple synchronous and primary endometrial malignancy with ovarian metastatic lesions.

Also MRI showed no Involvement of gastrointestinal tract thus ruling out Krukenberg's tumor.

Considering the MRI finding of deposits in the rectouterine pouch with involvement of cervical serosa and myometium we limit our diagnosis to either primary ovarian malignancy metastasising to pouch of Douglas or a primary in the POD itself.

Final diagnosis is based on the HPE report and clinical as well as intraoperative findings if staging laparotomy is done. Presenting complaints can be abdominal pain, distension, lump at introitus and decreased stool caliber. This can be associated with endometriosis or patients can have concurrent endometrial carcinoma.

Pelvic ultrasonography is the imaging modality of choice.

POD tumours which have invaded the uterine serosa may also appear as leiomyosacrcoma or fibroid. These are mullerian type of malignancies with concomitant endometriosis. A meta analysis found that endometriosis associated ovarian cancer is a/w better prognosis than the non endometriotic type. Endometriosis associated ovarian carcinomas are diagnosed at an early stage and are low grade disease.

However, PEComas can also be a possibility as these are mesenchymal tumors composed of perivascular epitheloid and can range from benign to malignant. These can arise at multiple sites eg-liver, lung and uterus.

Considering the fact that ovarian cancer spreads most commonly by exfoliation of the tissues and pouch of douglas being the most common site of collection of these tissues we come to a final conclusion of primary ovarian malignancy with peritoneal carcinomatosis.

Conclusion

The case presented at emergency hours at night. Poor visibility due to stenosis of vagina and pulled up cervix with a mass seen couldn't differentiate whether it was mass arising from the lower part of cervix or from the pouch of Douglas. Later due to the discrepancy in the HPE and MRI reports we were prompted to visualise it under sufficient magnification to locate the exact site and site of the lesion.

Colposcopic guided visualisation and biopsy helped in reaching to the conclusion. Final diagnosis was a case of ca ovary that presented unusually as a posterior growth that pushed open the pouch of Douglas and was seen as a growth arising from the lower cervical lip.

This rare presentation where the metastasis from the ovary had extended posteriorly respecting the boundaries of peritoneum to involve the POD to push open from beneath the posterior fornix created a dilemma of a dual malignancy.

Due to the advanced stage and poor prognosis considering the patients age, radiotherapy was opted as management regime.

References

- Triple Synchronous Primary Neoplasms of the Cervix, Endometrium, and Ovary: A Rare Case Report and Summary of All the English PubMed-Indexed Literature Ahmed Abu Zaid Mohannad Alsabban,3 Mohammed Abuzaid,4 Osama Alomar,3 Hany Salem,3 and Ismail A. Al-Badawi
- Synchronous primary malignancies of the female genital tract Ali Ayhan, bmer T. Yalpa, Z. Selquk Tuncer', Timur Giirganaand Tiir kanKiiQikallb Departments of 'Obstetrics and 'Pathology, Division of Gynecologic Oncology, School of Medicine, Hacettepe University, Ankara, Summary Turkey Accepted for publication 7 January 1992
- 3. Pathways of Metastases from Primary Organs to the Ovaries Yukio Yamanishi,1 Masafumi Koshiyama,1 Megumi Ohnaka,1 Masashi Ueda,1 Shingo Ukita,1 Kenji Hishikawa,1 Michikazu Nagura,1 Tomoko Kim,1 Masaya Hirose,1 Hiroshi Ozasa,1 and Tomoyuki Shirase2 1 Department of Obstetrics and Gynecology, Otsu Red-Cross Hospital, 1-1-35 Nagara, Otsu, Shiga 520-0046, Japan Ovarian Carcinomatosis: How the Radiologist Can Help Plan the Surgical Approach1 Stephanie Nougaret, MD Helen C. Addley, MRCP, FRCR Pierre Em- manuel Colombo, MD, PhD Shinya Fujii, MD Shaza S. Al Sharif, MD Sree Harsha Tirumani, MBBS, MD2 Kris Jardon, MD, MSc Evis Sala, MD, PhD, FRCR2 Caroline Reinhold, MD, MSc
- 4. Primary Pouch of Douglas malignancies: A case series and review of the literature Ker Yi Wonga,*, Ada Xinhui Nga, Timothy Yong Kuei Limb
- Berek & Novak's Gynecology Sixteenth Edition Jonathan S. Berek, MD, MMS Laurie Kraus Lacob Professor Emeritus Chair Department of Obstetrics and Gynecology Stanford University School of Medicine Stanford, California Deborah L. Berek, MA