Metastatic Lesions

Patient Information Series – What you should know, what you should ask.

What does it means when tumours from other sites outside the pelvis get into other pelvic structures, such as the uterus or cervix?

This process is referred to as “metastases”. Metastases means that cells from other primary tumors originating elsewhere in the body infiltrate the organs in the pelvis, particularly the lining of the uterus (endometrium) and or the body of the uterus or cervix.

How does this process happen?

When extra genital tumors metastasize to the uterus, it usually is a manifestation of widespread disease.

Metastases to the uterus can be transported by the blood. Likewise, the cervix contains vessels that transport lymph (clear fluid-containing cells) that moves away from the center, and spread of cancer cells by this route occur when the lymph channels are obstructed by nests of tumour cells, called tumor emboli.

How frequent is this process whereby uterine and endometrial masses develop from other primary tumors?

Extragenital primary tumors that metastasize to the endometrium and or uterine cervix are very rare. Only 10% of all cases of metastases to the female genital tract from extragenital sites occur to the uterus. The body of the uterus (corpus is the mostly affected site, even less frequent is the occurrence of metastases to the lining of the uterus (endometrium) only. The cervix is the rarest site of metastatic disease involving the female pelvic organs, occurring in 0.3% of cases.

How are these tumours in the uterus and endometrium from other distant sites suspected?

Abnormal vaginal bleeding and abdominal pain are the most common clinical manifestation of cases with metastasis to the endometrium or uterus.
Patient with malignancies involving the breast or gastrointestinal tract should be examined routinely for the possibility of uterine and cervical metastases.

What are the risk factors for uterine and endometrial masses developing from other primary tumors?

Although a relatively uncommon occurrence, women with previous history of colorectal, lobular breast or stomach cancer are at risk of getting metastases of their primary tumor. Women with metastasis from stomach cancer are often premenopausal.

What is the prognosis for women with uterine and endometrial masses from other primary tumors?

Unfortunately, the prognosis of these patients is poor, and removal of the uterus after diagnosis of these metastatic tumours generally does not influence the outcome

How can uterine and endometrial masses from other primary tumors be diagnosed?

Extragenital primary tumors that metastasize to the endometrium and or uterus/uterine cervix occur infrequently and can present a diagnostic challenge to clinicians and pathologists as it can be difficult to discriminate them on imaging tests from primary tumours involving these organs. A high index of suspicion for these rare lesions is required. For example, in the presence of a diagnosis of adenocarcinoma of the cervix and/or endometrium, a routine and complete gastrointestinal and breast survey should be done. Ultrasound is used to assess if there is lesion in the endometrium and uterine cervix, and if so, the size and location of the lesion. Will be measured along with assessing whether it demonstrates any abnormal blood supply, ultimately, a biopsy or a tissue specimen is needed for the definitive diagnosis of uterine and endometrial masses.

How should uterine and endometrial masses from other primary tumors be treated?

When determining a patients' specific treatment plan of uterine and endometrial masses from other primary tumors, the doctor will take three things into consideration: stage of the cancer, the grade (how aggressive and abnormal the cells look under microscope) and the type of cancer. In some cases, the goal of treatment is to cure the cancer; in others, is to prolong a patient's life or ease their symptoms.

In most cases hysterectomy (removal of uterus) is the first treatment given for uterine and endometrial masses. Oftentimes the ovaries are remove as well and either tissue samples from lymph nodes (a process known as “biopsy”) or remove the lymph nodes entirely. For some uterine and endometrial cancer, surgery isn’t the best option for those with high-risk of complications from surgery and on advanced stage, chemotherapy is typically considered instead.

Chemotherapy before the surgery is given to shrink the cancer and make it easier to remove. Depending on how far the cancer has spread in the body, chemotherapy may be given with radiation, or a more aggressive chemotherapy regimen maybe administered.

Extended beam radiation therapy (EBRT), also known as pelvic radiation, for cases there is high chance that the cancer could return, specifically in the vaginal cuff area. Typically, radiation is given after surgery as a form for therapy for stage 1 and 2 uterine cancer and sometimes as the first form of treatment for patients who have a higher-risk type of uterine cancer but for whom surgery is not an option

What questions should I ask?

Is the endometrial and or cervical lesion seen on ultrasound a metastatic lesion from my primary cancer?

It is difficult to determine if the endometrial and or cervical lesions seen on ultrasound are metastatic lesion from the primary cancer. Metastatic tumors presents a remarkable diagnostic problems for both the clinicians and pathologist, as they are sufficiently uncommon. A high index of suspicion and a good correlation with patient’s history are two important parameters to guide the medical team in the assessment of the lesion.

Do I have 2 primary tumors? What is my chance of survival?

Secondary tumors of the uterus from an extragenital origins is a form of metastasis and not as a primary tumor. The uterine body and cervix are frequently involved by direct extension from extragenital tumors. Uterine metastases from extragenital malignancies are rare, and account for less than 10% of all cases of metastases to the female genital tract. This presents simultaneously, prior to, or following the diagnosis of the primary tumor. Endometrial metastasis is associated with disseminated spread of cancer, and eventually shortens life expectancy. Median survival from the time of the diagnosis of the endometrial and or cervical metastases was 12 months.

Will the chemotherapy be different, given that there are two sites involved?

Cytotoxic chemotherapy has a limited place in the management of advanced and or metastatic endometrial and or cervical cancer. Commonly used agents include cisplatin and doxorubicin, but the side-effect profile may be unacceptable for many patients. The feasibility of administration of combination chemotherapy is limited in many patients on account of significant co-morbidity. More intense combination chemotherapy significantly improves the disease-free survival and the data indicate a modest improvement in overall survival. The addition of anthracyclines (e.g. doxorubicin) or the taxanes [e.g. paclitaxel (Taxol)] to cisplatin increases the response rate. More intensive regimens are associated with the gain in survival. While no one drug or regimen offers a clear benefit for women with advanced endometrial and cervical cancer, platinum drugs, anthracyclines and paclitaxel seem the most promising agents.

How long will I receive the chemotherapy with 2 tumors of different site?

Combination chemotherapy is given every 21 days for seven cycles or until progression or unacceptable toxicity.

What is the risk of my children or relative to have the same tumors as mine?

A risk factor is anything that raises the chance of getting the disease such as cancer. Different cancers have different risk factors. A certain factors can increase a woman's risk for endometrial and or cervical cancer coming from extragenital tumour. Many women with risk factors never develop metastatic endometrial and or cervical cancer. Some women with metastatic endometrial and or cervical cancer don't have any known risk factors. Even if a woman with metastatic endometrial and or cervical cancer has one or more risk factors, there's no way to know which, if any, of them caused her cancer.

A family history of metastatic endometrial and or cervical cancer is associated with a two-to-threefold increased risk of developing the disease (cancer). The associations between family history and endometrial cancer risk may be attributable to shared environmental or lifestyle risk factors, twin studies have estimated heritability between 27% and 52%. Furthermore, colorectal, breast and stomach cancers co-occur with endometrial cancer at significantly higher frequencies in patient compared to control families.

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