CASE REPORT

Clitoral metastasis of endometrial carcinoma

Arshia Javed, Haleema Hashmi

Abstract:
In this paper we report a new case of Metastatic endometrial carcinoma to clitoris, and describe its clinical and pathological features. Endometrial cancer is the commonest gynecological malignancy with incidence of 6% of women's cancer. The blood born metastasis is to the lungs, liver, bones, brain and vagina, through direct extension to the cervix and peritoneum surfaces and via lymphatic to the supraclavicular nodes. Secondary to clitoris is a rarity and only been reported in few cases in international data.

Keywords: Endometrial cancer, clitoris, metastasis

Introduction:
Metastatic tumors of the vulva are unusual , representing only 5-8% of all vulvar cancers.[1] The uterus is the fourth most common primary site of cancer in women , accounting for 6% of all cancers in female patients. [2,3]

The clitoris may be the primary site of neoplasm or that of a tumor metastasizing from different human organ,[4] Endometrial metastasis may occur to adjacent organs by direct extension or in the form of distant metastasis (lungs , liver or bones) by lymphatic or hematogenous spread.[5]

This case report describes vulvar metastasis of endometrial cancer to clitoris. The clitoral metastasis are exceptionally rare , a few cases having been reported in literature.

Case:
A 53 years old post-menopausal lady came to gynecological clinic in November 2010 with complaint of swelling at vulva from one year, noticeably worsening icthing and blood stained non foul smelling vaginal discharge. She had weight loss of about 4 Kg in this period. She had no significant past history. She went through menopause at the age of 50 years .There was no family history of gynecological cancer.

On arrival, her general physical and abdominal examinations were normal. Vaginal examination revealed a mass of about 5cm over clitoris, hard in consistency, free from side to side and tender to touch. Uterus was 8 weeks size fixed, fornices were clear. There were bilateral palpable inguinal lymph nodes.

Her ultrasound scan showed a heterogenous mass in the uterus of about 1.6cm. A well-defined mass on clitoris .Both ovaries atrophic .Preoperative investigations revealed hemoglobin of 12.0g/dl with normal white cells and platelets count. Renal and liver function tests were within normal limits .CT scan upper abdomen showed enlarged lymph nodes in aortic and Para aortic region. Few small sub centimeter nodules are seen in lower lobe of left lung which could represent metastasis. MRI Pelvis revealed abnormal signal intensity more seen in endometrial canal with loss of junctional zone. Abnormal signal intensity heterogenous mass seen anterior to pubic symphysis, these features arising suspicion of endometrial carcinoma with vulval metastasis.

Examination under anesthesia done revealed stony hard mass of about 5cm at clitoral region. Overlying skin was normal .Uterus anteverted

The Aga Khan Hospital For Women, Garden, Karachi
A Javed

Liaquat National Hospital , Karachi
H Hashmi

Correspondence:
Dr Arshia Javed
B-3 Cosy Homes Block 13-A , Gulshan-E-Iqbal,Karachi.
drarshiajaved@yahoo.com
Cell: 0300-2119180

8 cms in size mobile, fornices clear. Cervix and vaginal epithelium were normal. Rectal examination showed no abnormality. On endometrial biopsy large amount of unhealthy curetting's obtained. Clitoral biopsy taken, specimens sent for histopathology.

The histopathological diagnosis was poorly differentiated (Grade III) adenocarcinoma of endometrium with metastatic adenocarcinoma of vulva.

A diagnosis of stage 4 adenocarcinoma of endometrium with clitoral and pulmonary metastasis made with no intra-abdominal metastasis below the diaphragm.

A plan for Debulking surgery and excision of vulval growth made. Total abdominal hysterectomy with bilateral salpingoophorectomy, pelvic and Para aortic lymphadenectomy and omentectomy done with removal of vaginal cuff. Hard encapsulated clitoral mass removed with 1cm skin margin around.

Histopathology showed poorly differentiated Endometroid Adenocarcinoma . Tumor invades to more than half of myometrium with focal endocervical invasion .Bilateral adnexa were tumor free. Omentum and vaginal cuff were not involved .vulval growth showed metastatic endometroid adenocarcinoma .Lymph nodes were negative.

Patient reviewed by oncology, she advised PET CT and adrenal gland evaluation for metastasis. Plan made for chemotherapy and radiotherapy if metastasis were found otherwise only chemotherapy.

Discussion:

Endometrial carcinoma is the most common malignant gynecological neoplasia in developed countries. The metastasis to the vulva are uncommon, accounting only for 5-8% of all vulvar cancers.[6]Like Dehner[7] found 8.4% of metastatic tumors of vulva in a series of 262 cases of malignant tumors at this site. More over Neto et al [8] reported 66 cases only six of these involved endometrial carcinoma. Only one case involved the clitoris.

Clitoral metastases are rare. A search of literature using Medline, PubMed and Cochrane Database of systemic reviews revealed only a few cases of vulvar metastasis in endometrial cancer.[9]

Endometrial carcinomas extend through direct spread, hematogenous spread and lymphatic spread.[9]

In this case report the extra uterine spread through myometrium is excluded by clinical examination and MRI pelvis. Vaginal metastasis excluded by clinical examination. Thus clitoral metastasis was most likely due to hematogenous spread, as Dehner [7] remarked that the fact that vascular involvement is common tends to confirm that this is the mode of dissemination to the vulva and route of distant metastasis. However lymphatic spread cannot be ruled in this case , since advance endometrial tumors behave as similar to malignant ovarian tumors , with spread to round ligament and to pelvic lymph nodes.[10,11]

A case report of stage 4 endometrial cancer with clitoral metastasis treated by 4 cycles of chemotherapy showed regression of pulmonary nodules followed by pelvic radiotherapy,[9]

This patient was treated with 3 cycles of chemotherapy after which she lost from follow-ups.

In conclusion little is known on the association between endometrial cancer and metastasis to the clitoris.so awareness among women for regular checkups and early reporting should be emphasize.

References:

1. Fakor F, Falah H.H, Jahromi K.S . Acta Medica Iranica, 2013; 51(9) :652-654.
2. Parazzini F, La Vecchia C, Bocciolone L, Franceschi S. The epidemiology of endometrial cancer, Gynecol Oncol 41(1991) 1-16.
3. Parazzini F, Franceschi S, La Vecchia C, Chatenoud L, Dicintio E . The epidemiology of female genital tract cancer, Int J Gynecol cancer 7(1997)169-181.
4. Semczuk A, Skomra D, Jankiewicz K, Adamiak A, Korobowicz E, Rechberger T. The immunohistochemical profile of the primary and metastatic carcinoma of the clitoris : a case report. Arch Gynecol Obstet 2005; 273(3):187-91.
5. Filho A.C., Garbeloto E, Christina k, Lage L. Endometrial carcinoma metastatic to the clitoris: A case report. Gynecol Oncol 2014;8:1-3.
6. Lerner L.B, Andrews S.J, Gonzalez J.L ,Heaney J.A,Currie J.L.

Vulvar metastasis secondary to transitional cell carcinoma of bladder: a case report , J Reprod Med 44(1999) 729-732.
7. Dehner L.P. Metastatic and secondary tumors of vulva. Obstet Gynecol 42(1973) 47-57.
8. Neto A.G., Deavers M.T., Silva E.G.,Malpica A. Metastatic tumors of vulva: a clinicopathological study of 66 cases. Am .J. Surg Pathol.2003;27:799-804.
9. Mandal S, Lowe J, George M . Clitoral metastasis in poorly differentiated endometrial Adenocarcinoma. IJGO 2007;7(2):8.
10. Casimiro L.M. Vilata Corell J.J.Cutaneous metastasis of internal neoplasm. Med. Cutan. Iber.Lat.Am.2009;37:117-129.
11. Hamilton C.A., Cheung M.K., Osann K, Chen L, Teng N.N, Longacre T.A, Powell M.A, Hendrickson M.R, Kapp D.S, Chan J.K .Uterine papillary serous and clear cell carcinomas predict for poorer survival compared to grade 3 endometroid corpus cancers.Br. J.Cancer.2006;94:642-646.