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Urology

PRIMARY MALIGNANT MELANOMA OF UTERINE CERVIX – A RARE CASE REPORT

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ABSTRACT Malignant melanoma originates from melanocytes or pigment cells. It accounts only 2% in female genital tract with an incidence of only 1.6 cases per million female. Melanomas generally seen over the skin and mucous membranes. Superficial type of melanoma commonly seen in women and nodular type in men. Proper gynecological, histopathology and immunohistochemistry confirms the diagnosis of malignant melanoma of cervix. As patient usually present in advanced stage, and due to the aggressive behaviour of tumor the prognosis of malignant melanoma of cervix is poor.

KEYWORDS : melanocytes, incidence, aggressive behaviour, advanced stage.

INTRODUCTION-

Malignant melanoma is a tumor commonly arising from melanocytes of the basal layer of epidermis [1]. Malignant melanomas commonly seen over the skin and mucous membrane of oral cavity, gastrointestinal tract, respiratory tract and urogenital tract [2]. Melanomas most commonly seen on legs in women and on back in men. Different types of melanomas include superficial spreading, nodular, lentigo maligna and acral melanoma among which superficial type of melanoma is commonly seen in women and nodular type in men. Melanoma is considered as most dangerous type of skin cancer mostly seen in men when compared to women which resulted in 59,800 deaths of 3.1 million cases diagnosed globally with melanoma in 2015 [3]

Primary malignant melanomas accounts only 2% of all melanomas in female genital tract [4] among which 5% melanomas detected in vulva and vagina [5]. Primary uterine cervix melanoma is extremely rare with only 81 cases reported so far in literature [6].

Mucosal melanomas are just treated like cutaneous melanomas as no effective treatment strategy is being yet considered because of scarcity of patients [7]. Although current treatment plan for cervical melanomas includes radical hysterectomy, chemotherapy and radiotherapy (external beam or intracavitory) or in combination [8] the outcome of melanoma is poor because of its aggressive behavior.

CASE REPORT-

A 45 year old elderly female presented with complaints of foul smelling vaginal discharge, bleeding per vagina and lower abdominal pain for a period of four months. Gynecological examination was done after taking the consent from the patient where Per speculum examination revealed hyper pigmented cauliflower like growth involving whole of the cervix .Bilateral parametrium is not involvement on rectal examination and clinically staged according to International federation of gynecology and obstetrics as II A.

Colposcopy guided biopsy from the cervical growth was done and the sample was sent for histopathology examination where heavy infiltration of pleomorphic tumor cell exhibiting abundant intra cytoplasmic and extra cytoplasmic melanin pigment noticed suggestive of malignant melanoma.

Computer tomography of the abdomen and pelvis signifies exophytic mass lesion approx. 48*44 mm size involving posterior lip of cervix. No evidence of obvious parametrium involvement noticed. A 5mm right and 4mm left internal iliac lymph nodes noted with rest of the abdominal organs were normal. She has no family history of cancers in her first degree relatives.

Specimen of cervical biopsy was sent for immunohistochemistry where tumor cells were stained for S-100 and HMB 45 where the antibodies were reactive for both S-100 protein , Human melanoma black (HMB 45+) and negative for cytokeratin (CK -) against tumor cells, confirming diagnosis of malignant melanoma.

Extensive search for other melanotic lesions over skin, mucosal sites were found negative, hence primary malignant melanoma of uterine cervix is confirmed.

Patient was than advised for radical hysterectomy. As patient refused for surgery concurrent chemo radiation therapy with Dacarbazine 800 mg/m2 iv day1 and cisplatin 20mg/m2 between day 1- day 4 at 3 week interval was started concurret with External beam radiotherapy to whole pelvis with daily 200cGy in 25 fractions upto a total dose of 5000cGy was planned. Currently she has completed 2 cycles of chemotherapy and on regular visits.

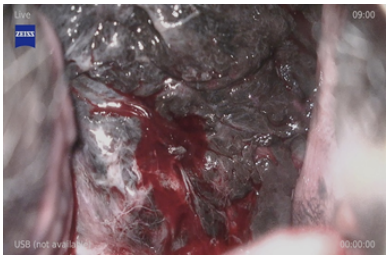
DISCUSSION:

Primary malignant melanomas are rare in female genital tract with an incidence of only 1.6 cases per million female [9], among which vulva and vagina commonly involved [10].Cervical malignant melanoma is extremely rare and generally noticed in elderly females. Mostly all present with similar complaints of vaginal discharge and bleeding [11]. Usually the diagnosis of malignant melanoma of cervix is made by gynecological examination, colposcopy and cervical pathology. Confirmation is being done by immunohistochemistry as they are generally positive for S-100, HMB 45, MART1, Vimentin. Among all S-100 protein is considered to be sensitive stain compared to HMB 45 which is specific for diagnosis of malignant melanoma [12]. The staging is done according to FIGO system used for cervical cancer as it correlates better with the survival [11]. According to morris and taylor cervical melanomas are diagnosed when there is absence of melanomas elsewhere in the body, junctional change in cervix and metastatic pattern of cervical cancer [13]. Although the treatment cervical melanomas is not well established, generally radical hysterectomy is being routinely done. Chemotherapy, radiotherapy or in combination is also being tried in melanomas. Dacarbazine which is routinely used in cutaneous melanoma is also being used in cervical melanomas where the response rate achieved was around 15% -20%. Other chemotherapy drugs like temozolamide , cisplatin , vinblastine, vincristine, melphalan are also used in cervical melanomas [14-15]. Malignant melanomas are generally considered radioresistant , and radiation is only useful in palliative therapy who is not suitable for surgery [15]. Despite surgery, chemotherapy and radiotherapy the prognosis of the disease is poor because of its aggressive behavior, and also due to patients presenting in advanced stage. The 5 year survival rate for stage I is 18.8%, for stage II is 11.1%, for stage III and stage IV 0% [11]. Prospective study in larger group of population is to be done in order to propose standard treatment strategy for malignant melanoma of cervix.

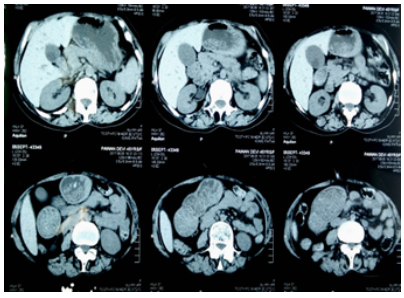
CONCLUSION:

Primary malignant melanoma of uterine cervix rarely effects elderly females. Till date surgery remains the choice of treatment which improves the survival of patients. Melanomas are generally radio resistant and only reserved for palliative therapy .Adjuvant chemotherapy, radiotherapy, immunotherapy also used in order to prevent the recurrence of the tumor. Despite all, the prognosis remains

poor in malignant melanomas as mostly because of its aggressive nature and patients presenting at an advanced stage. Regular health checkups and gynecological examination should be done in elderly females who complain of vaginal bleed or discharge in order to diagnose the cervical malignant melanoma at an early stage which improves the outcome of the disease.

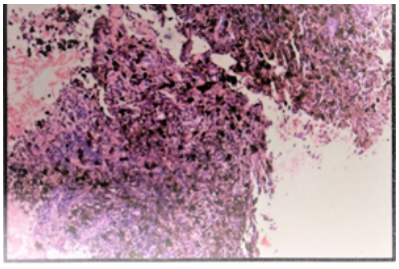


COLPOSCOPIC VIEW OF CERVIX MELANOMA Hyper pigmented mass involving whole of the cervix.



Computer tomography of the pelvis reveals exophytic growth involving posterior lip of cervix with left internal iliac lymph nodes

Microscopic examination of cervical biopsy tissue sample:



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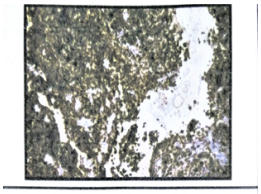
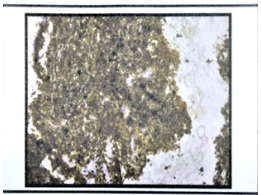
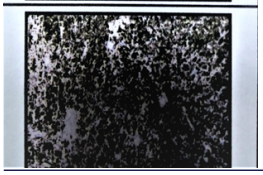


HMB 45 MARKER POSITIVE



S-100 (EP32) MARKER POSITIVE



CK (AE1/AE3) MARKER NEGATIVE

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