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Malignant Melanoma of the Vagina - A Case Report

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Summary:

A 52 yrs old post menopausal lady was admitted in-the Gynae department of SSMC & Mitford Hospital with a small mass in the lower vagina, foul smelling discharge and occasional itching at that site for 1 year. Examination revealed a small, irregular, firm, partially necrosed, non tender growth with foul smelling brownish discharge 2cm below the external urethral meatus, uterus atrophied, cervix flashed, fornicesfree but few small, black, flat nodules scattered in the posterior vaginal wall. She had no history of exposure to any radiation or sunlight to that area or surgery but only received antitubercular drugs for six month for pulmonary tuberculosis. After conservative treatment excision biopsy was taken and histopathology revealed Malignant Melanoma. She was referred to cancer Institute for adjuvent radiotherapy .

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Introduction :

Melanoma of the vagina is rare and carries a poor prognosis five year survival rate is seven percent depending upon the depth of the epithelial invasion. Its clinical feature and treatment are similar to those of the squamous cell carcinoma of the vagina.[1] The anterior surface and lower half of the vagina are the most common sites. Grossly, the tumour are exophytic and described as polypoid or pedunculated with secondary necrosis.[2] Therapeutic irradiation may be a factor in the development of this type of lesion in non-sun exposure area like genital tract.[3] Though it is very rare, but its diagnosis is usually easy if a melanine pigment is present.[4] The natural history of the vaginal malignant melanoma differs from that of the skin with a more aggressive behaviour as it metastasizes early through the blood stream. Primary treatment should be wide local excision of the tumour, however treatment is ineffective if it is deeply invasive. It does not response to chemotherapy.[1,5]

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Case report

A 52 years old post menopausal widow was admitted in Gynaecology department of Sir Salimullah Medical College & Mitford Hospital for a growth in the lower vagina with foul smelling brownish per vaginal discharge for one year. According to her statement she was menopausal for three years and for one year she felt a small, soft, blackish swelling just below the external urethral meatus with occasional itching but no pain.

After that, the growth gradually increased in size with continuos brown and occasional blood stain discharge which became foul smelling. She also complained a single episode of vaginal bleeding three months back. Initially the growth was soft but gradually it became firm in consistency.

On admission, physical examination disclosed an essentially healthy appearance and normal vital signs. Pelvic examination disclosed that there was foul smelling brownish discharge from the growth which was irregular, firm, partially necrosed, non-tender, not bleeds on touch and about 4 cm x 3 cm in size arising 2 cm below the external urethral meatus in the lower part of the vagina. Uterus was atrophied, cervix flashed with the vagina, fornices were free. There was also few small, black, flat surface nodule scattered in the upper part of the posterior vaginal wall . She had no history of surgery or radiation else where in the body. Her skin did not demonstrate any suspicious melanotic lesion. Upon further questioning, the patient denied having had any appreciable sun exposure to the thigh and pelvic areas. Her past medical history only revealed that she was treated for pulmonary tuberculosis with anti tubercular drugs for

6 months. All necessary investigation including USG of whole abdomen was done. All reports were found within normal limit except ESR which was 52 mm during 1st hour and provisional diagnosis of vaginal carcinoma was made.

Initially a short course of conservative treatment to control secondary infection was given with ciprofloxacin, metronidazole and antifungal drugs. After subsidence of local infection a biopsy was taken from the growth and other black sport, and histopathological report revealed malignant melanoma. Then patient was finally treated by wide local excision of the growth with ·5 cm of surrounding apparently normal tissue. The histopathology of all excised tissue finally conclude the malignant melanoma. The patient made an uneventful immediate post operative recovery and she was referred to cancer institute for adjuvant radiotherapy.

Discussion

Malignant melanoma is a virulent disease characterized by steadily rising incidence and mortality rates.[6] In 1996 an estimated 38.300 new invasive cases are expected in the United states resulting 7300 deaths.[7] The incidence of malignant melanoma of the vagina in the united states has been estimated to be 0.026 per 100,000 per year, with a five year survival rate of 19%.[8] Epidemiologic and case control studies suggest that sunlight is the most important environmental factor in the pathogenesis of the melanoma, with radiation in the ultraviolet B range proposed to be the critical component. Furthermore melanoma arising from non sun exposed area such as the genital tract are uncommon and its origin is disputed. Some consider that a vaginal tumour of this type is always secondary to a lesion else where. Other postulate a primary development as a result of metaplasia or misplacement of mesodermal and epithelial tissue, fewer than 140 primary case was reported.[1,9] About 5% of the vulval carcinoma are malignant melanoma. Since 0.1% of all nevi in the women are on vulvar skin and most commonly arise in the region of labia minora and clitoris, and there is a tendency to superficial spread towards the urethra and vagina.[2] Neovaginal malignant melanoma of a 71 years old caucacian lady following surgery and radiation for vulval squamous cell careinoma also reported by a case report.[3] CobellisL, et al reported, twenty patient affected by vaginal malignant melanoma, 15 of which were evaluable for outcome, were observed from 1969 to 1993. All patients died of their disease and median overall survival rate was 19 months.[5] A review of the literature revealed 22 long term survivals after treatment of malignant melanoma of the vagina and only four surviving more than 10 year.[10] With cytodiagnosis however it is difficult to differentiate amelanomic melanoma or scantily pigmented melanoma from other conditions. Monoclonal antibody HMB-45, the efficacy of which has been established in histological studies was used in the cytodiagnosis of amelanotic melanoma in the vagina, particularly because it obviated the need for tissue invasion.[4] The sentinel node biopsy has been established as standard procedure in many types of cancer. Nokogawa-s et al reported successful detection of the sentinel node using a radiopharmaceutical directed mapping technique in malignant melanoma of the vagina.[11] Metastatic ovarian malignant melanoma are more common than primary ovarian malignant melanoma; to date, about 73 cases of malignant melanoma metastatic to ovary, compared to only about 20 cases of primary ovarian melanoma have been reported in the world literature.[12]

Conclusion

Nevi rarely occur in the vagina, therefore any pigmented lesion of the vagina should be excised or biopsied. Melanomas of the vagina metastasize like epidermoid cancer, although liver and pulmonary metastasis are more common. In general the prognosis in women with these malignancy is poor regardless of type of surgery. Depth of the infiltration seems to be the only important prognostic factors influencing the survival. With wide local excision intracavitary irradiation may be given as adjuvant therapy.

Reference:

1. Bhatla N. Jeffcoates Principles of Gynaecology, International Edition, Chapter-23, P-442-43.
2. Alan H. DeCherney lauren Nather, Current obstetrices and Gynaecologic Diagnosis and treatment, International Edition, P-885-889.
3. Primo N. Lara, Jr., MD et al Neovaginal malignant melanoma following surgery and radiation for vulvar squamous cell carcinoma, Gynaecologic Oncology 1997; 65: 520-522.
4. Takehara-M et al; HMB-45 staining for cytology of primary melanoma of the vagina. A case report. Aeta-Cytol, 2000. Nov-Dec; 44: 1077-80.

5. Cobellis-L et al; malignant melanoma of the vagina. A report of 15 cases. Eur J Gynaecol-Oncol. 2003; 21 : 295-7

6. Marks R. Prevention and control of melanoma; the public health approach CA Cancer J Clin 1996; 46: 199-216.

7. Rigel D Malignant melanoma: Perspections on incidence and its effects on awarness diagnosis and treatment. CA Cancer J Clin 46;1996: 195-198:

8. Weinstock MA. Malignant melanoma of the vulva and vagina in the Unites states: Patterns of incidence and population-based estimates of survival. Am J Obstet Gynaecol 1994; 171: 1225-1230.

9. Brand E, Yaos, Lagasse L, Berek JS. Vulvovaginal melanoma: report of seven cases and literature review, Gynaecol Oncol 1989; 33-54-60.

10. Panek.-G; Bidzinski M Nasierowska-Guttmeier A. Primary vaginal and uterine melanoma- A case of long term survival after local excision and vaginal brachytherapy. Ginekol Pol, 2001; Dec; 72: 1501-6

11. Nakagawa-S. et al. The evaluation of the sentinel node successfully conducted in a case of malignant melanoma of the vagina. Gynecol-Oncol. 2002:86:387-9

12. Benjamin Piura, et al. Malignant melanoma of the ovary. Gyanecologic Oncologic 68: 1998; 201-205;