Malignant melanoma in rare primary sites – a series of three cases

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Objective: Melanoma is one of the most life threatening neoplastic lesions, which very rarely occurs in the cervico vaginal region and breast. In the published literatures, among all reported cases of melanoma, only 0.3% were located in the vagina and <5% in breast. Anorectal melanoma is a rare type of melanoma that accounts for 0.4% to 1.6% of total malignant melanomas. The incidence of AM increases over time, and it remains highly lethal, with a 5-year survival rate of 6% to 22%. The age-adjusted annual incidence of anorectal melanoma was 0.343 per 1 million population (0.259 in male and 0.407 in female). The annual incidence rate of cervicovaginal melanoma is reported to be 0.26 per 100,000 women.

Case 1: A 56 year post menopausal female presented to department of gynaecology and obstetrics with complaint of abnormal vaginal bleeding. Her past medical history was unremarkable. Per vaginal examination revealed of blackish pigmented indurated mass in the posterior fornix of vagina, which was extended upto cervix. Onguinal lymph node was not palpable. Preoperative CT scan of abdomen and pelvis, chest x-ray and per rectal examination were normal. She was underwent TAH – BSO with wide local excision of lesion. Histopathological examination showed pigmented pleomorphic malignant cell with epithelioid spindle morphology and ulceration of squamous epithelium (fig3). The tumor extended upto cervix (fig3). Confirmation was done with IHC (fig2). Pathological stage was PT1N0M0 (clinically FIGO stage I). Patient was underwent post operative radiotherapy. Clinic radiological follow up at 6 month interval revealed no evidence of distance metastasis or local recurrence of tumor.

Case 2: A 26 year female presented with a nodule in the upper and outer quadrant of right breast (2X2 cm) with blackish discoloration of skin, axillary lymph nodes were palpable. FNAC followed by HIC confirmed the diagnosis of malignant melanoma. Thorough clinical examination revealed any other lesion elsewhere. The patient underwent modified radical mastectomy. Axillary lymph nodes excision followed by radiotherapy. Patient is still under follow up.

Case 3: A 70 year old female presented with painful bowel movements for 2 months and blood streaked stool for last 3 months. Digital examination of the rectum revealed a pigmented, polypoid anal mass, measuring (2X2 cm). The mass was located 1 cm from anal verge. FNAC from the polypoid mass showed highly cellular smear, mainly dispersed cells and loose clusters, individual cell having abundant cytoplasm, eccentric nuclei, hyperchromatic nuclei and prominent nucleoli, intracellular melanin pigments and background contain macrophage. A cytopathological examination, CT scan of chest and abdomen revealed no metastatic disease. It also demonstrated 2 enlarged perirectal lymph nodes. Abdominal perineal resection with left sided colostomy was planned but the patient did not turn up in the subsequent visit and was lost on follow up.

Discussion: Melanoma is one of the most life threatening neoplastic lesions, which very rarely occurs in the cervico vaginal region and breast. In the published literatures, among all reported cases of melanoma, only 0.3% were located in the vagina and <5% in breast. In contrast to breast carcinoma, a significance of chemotherapy or hormonal therapy is unclear. Despite various aggressive systemic treatments, cutaneous malignant melanoma is possibly a life-threatening disease in which regional or distant metastasis may develop. The most common metastatic site is brain, for which dacarbazine is considered the standard treatment. The important prognostic factors are regional lymph node metastasis and distant metastasis. During follow-up visits, particular attention should be paid to the importance of breast examination. Vaginal malignant melanoma, arisen from melanocytes, which may be present in the epithelium of the vagina in around 3% of women, is a rare gynecological malignancy. It accounts for less than 1% of all malignant melanomas, and less than 3% of all primary malignant tumors of the vagina. The 5-year survival rate for this very aggressive, rapidly growing tumor is very poor, and is reported to be 0 -25% irrespective of the chosen therapy. The role of chemotherapy in vaginal melanoma has not been completely defined because of the small number of cases. Dacarbazine has been considered the standard of treatment for metastatic or recurrent melanoma. Anorectal melanoma is a rare type of melanoma that accounts for 0.4% to 1.6% of total malignant melanomas. The incidence of anorectal melanoma increases over time, and it remains highly lethal, with a 5-year survival rate of 6% to 22%. In addition, it is the most common primary melanoma of the gastrointestinal tract, mostly misdiagnosed as hemorrhoids, polyp, adenocarcinoma or rectal ulcer. Optimal treatment is still controversial. Surgical approaches include wide local excision and abdomen perineal resection. In absence of known primary, diagnosis of malignant melanoma should be kept in mind even in atypical locations.

Conclusion: Although melanoma in the above sites is rare, it should be considered as one of the differential diagnosis in malignancies of these locations.

References: