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RESEARCH ARTICLE

MALIGNANT LESIONS WITH CUTANEOUS METASTASIS

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ABSTRACT

Cutaneous metastasis occur infrequently and are rarely present at the time the cancer is initially diagnosed (1). In majority of cases, cutaneous metastasis presents late, having a poor prognosis. The definite diagnosis of cutaneous lesions can differentiate between primary and adnexal or recurrence of malignancy and this can prevent further unnecessary surgical interventions. Such a result requires high degree of suspicion since the clinical signs and symptoms of skin metastases are difficult to analyze. Cutaneous metastasis occur in 0.6% -10.4% of all patient with cancer and represent 2% of all skin tumors (2).

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INTRODUCTION

Cutaneous metastasis can be defined as the spread of a tumor from the site of its primary origin to the skin (Wong, 2014). Upto 9% of the patients with cancer may develop skin metastasis (Lookingbill, 1993). Carcinomas are the most common type of malignancy to metastasize (Schwartz, 1995), Usually, cutaneous metastasis of an internal malignancy are seen in areas closer to the primary tumor, but may also be found at distant sites. The relative frequency of metastatic cutaneous lesions in each sex correlates with the frequency of different types of primary cancer. Cancer that have high propensity to metastasize to the skin includes melanoma (45% cases of cutaneous metastases cases) and cancers of breast (30%), nasal sinuses (20%), larynx (16%) and oral cavity (12%). Since, breast cancer is so common, cutaneous metastasis of breast cancer is the most frequently encountered type of cutaneous metastases in most clinical practices (Vichapat, 2012).

MATERIALS AND METHODS

This was a retrospective study conducted at Patna Medical College & Hospital, during January 2014- February 2015, in which 97 patients had been examined for cutaneous lesions ranging from plaque to nodules and investigated for the same by FNAC and biopsy.

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Samples were obtained using conventional method of FNAC and stained by GIEMSA and PAP stain. Results with malignant cells were subjected to histopathological examination. In our study, excluding the skin adnexal lesion, the usual metastatic lesions were close to the primary sites either cutaneous or draining lymph nodes. Out of 97 patients, 8 patients showed cutaneous lesions at unusual sites distant from the primary carcinoma.

RESULTS

Out of 97 patients subjected to FNAC, 8 cases (8.3%) were diagnosed as cutaneous metastases distant from the primary malignancy.

DISCUSSION

In our study of one year, 8 cases out of total 97 patients with internal malignancy presented with cutaneous metastasis, thus showing a prevalence rate of approximately 8.3% which is near the higher limit of the reported range of 0.6%-10.4%. Cutaneous metastasis may either be the initial manifestation of an internal malignancy or represent neoplastic disease (Gul, 2007). In the present study, all of the 8 cases had a previous history of primary malignancy, thus showing the recurrance of primary tumor. The patients were represented by 6 males and 2 females with the age range of 14-67 yrs in males and 40-46 yrs in females.

Table 1. Cutaneous Metastasis at unusual sites

Sl. No.	Primary Malignancy	Morphological Diagnosis	Sites Of Metastasis	Sex	Age(yrs)	Lag Period(yrs)
1	Breast	Ductal Carcinoma	Right Arm	F	46	4
2	Buccal Mucosa	Squamous Cell Carcinoma	Right Arm	M	50	2.5
3	Buccal Mucosa	Squamous Cell Carcinoma	Right Lumber	M	45	3
4	Floor Of Mouth	Adenoid Cystic Carcinoma	Umblicus	F	40	3.5
5	Tonsillar Area	Squamous Cell Carcinoma	Right Arm	M	55	3
6	Supraglottic Area	Squamous Cell Carcinoma	Forehead	M	14	2
7	Lung	Squamous Cell Carcinoma	Chest Wall	M	51	5
8	Stomach	Adenocarcinoma	Left Scapular Region	M	67	4.5

Table 2. Fine Needle Aspiration Sites of Cutaneous Metastasis

Sl. No.	Sites Of Metastasis	Male	Female	Total
1	Right Arm	2	1	3
2	Right Lumber	1	0	1
3	Umblicus	0	1	1
4	Forehead	1	0	1
5	Chest Wall	1	0	1
6	Left Scapular Region	1	0	1
	TOTAL	6	2	8

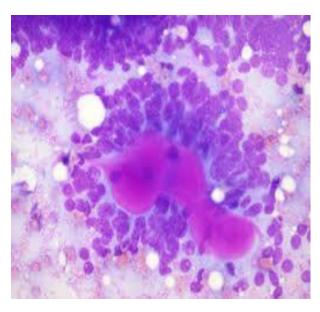


Fig 1. Adenoid Cystic Carcinoma (FNAC)

Most of the studies report a higher incidence of cutaneous metastasis in males rather than females (Bansal et al., 2010; Gattuso et al., 1998). Age ranges in other studies are variable with 2-74 yrs in one study (Bansal, 2010), and 32-89 yrs in another study (Gattuso, 1998). In our study we have a 14 yr old male with malignancy of supraglottic area showing metastasis over the forehead, an unusual site and early age. According to Basu and Mukherjee, gynaecological malignancies rarely give rise to metastatic deposits on the skin (Basu, 2013), Skin metastasis from the uterine cervical carcinoma is rare event with reported incidence ranging from 0.1% to 2% (Brady, 1997). Our study found no case of cutaneous metastasis from carcinoma cervix, but we have encountered a female with adenoid cystic carcinoma in the floor of the mouth with metastasis at the umblicus. Spread to the regional skin is via lymphatics, whereas subsequent spread to distant sites is due to hematogenous spread (Gattuso, 1998).

Conclusion

Cutaneous metastasis occur infrequently and the underlying primary malignant lesion rarely present with skin involvement.

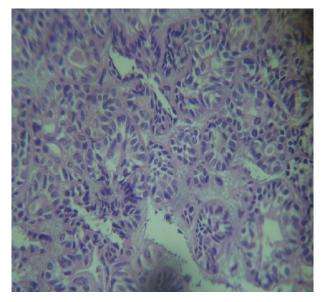


Fig 2. Adenoid Cystic Carcinoma (H&E)

However, every nodule coming for investigation should be cautiously diagnosed keeping in mind the possibility of cutaneous metastasis at unusual sites. Cutaneous secondaries represent an advanced stage of disseminated disease and may very rarely be the first sign of malignancy. A detailed history regarding previous malignancy must be enquired. FNAC should be performed of the cutaneous lesions as it is simple, rapid and inexpensive procedure with high sensitivity and specificity and thus can easily differentiate between benign and malignant lesions. However, histopathological correlation of skin lesions in case of malignancy is needed to differentiate between primary and metastatic carcinoma.

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