*Case Report*

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# Unusual Presentation of Malignant Melanoma: A Case Report

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**Abstract**

***Aim:*** The case report aims to highlight the unusual presentation of Malignant Melanoma. Malignant melanoma is a tumour of melanocytic origin. Lymphatic and haematogenous spread is common in this condition.

***Objectives:*** To establish the importance of Immunohistochemistry in order to treat Malignant Melanoma.

***Material and Method:*** We present a case of 51 year old male with a lump in left chest region. Imaging done shows a lesion in the right lower lobe of lung and a right suprarenal mass. Histopathology of the lesion in conjunction with immunohistochemical markers FLI1, S 100, HMB 45, Melan confirm the diagnosis of malignant melanoma.

***Result:*** Due to its rare presentation and in some cases unusual presentation Malignant Melanoma is often difficult to diagnose or diagnosed late, thereby making it potentially life threatening.In our case report the immunohistochemical examination was done which helped us to establish a solid diagnosis of unusual presentation of Malignant Melanoma, so that the most appropriate therapeutic management can be applied favouring a better clinical outcome.

***Conclusion:*** Clinically Malignant Melanoma do not present with distinctive features, therefore there diagnosis can be established with the help of histopathology with specific tissue markers.

**Keywords:** Malignant melanoma, unusual presentation, unknown primary

## INTRODUCTION

Malignant Melanoma (MM) is one of the most challenging cancers to diagnose because it requires high levels of expertise from the dermatologist to detect the lesions at an early stage and from the histopathologist to interpret the complex architecture of the skin biopsies.[1] Moreover, MM exhibit various clinicopathologic and cytologic manifestations. Recognition of some MM variants with unusual presentations is even more difficult because of their scarcity. Although uncommon MM variants generally account for less than 2% of all melanomas. Early diagnosis of MM is thus of vital importance for appropriate

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management and a successful outcome. In many instances, dermatoscopy may help to determine the malignant potential of the lesion and to discriminate between the clinicopathologic variants of MM.[2] The clinical, dermatoscopic, and histologic characteristics of the MM subtypes with the highest risk of diagnostic failure, with the aim of helping practitioners to improve the differential diagnosis of these rare MM and reduce the risk of harmful consequences on patient survival. we report a case of malignant melanoma that presented with lump in left side of chest region and epigastric region.

## CASE REPORT

A 51 year old male presented with complain of lump in left side of chest region and epigastric region since 1.5 month. Patient had no comorbidities and no family history of malignancy. He had no history of any addiction to smoking tobacco, alcohol, tobacco Chewing. CECT Chest showed a 3.4x 2.4x3.1cm lobulated (matted) soft tissue density lesion at anterior basal segment of right lower lobe abutting to oblique fissure. CECT Abdomen showed mass 4.2x4.2x4.7 cm well defined partially necrotic soft tissue density lesion in right suprarenal region which is indenting anteriorly into lower surface of the liver and inferiorly upto upper pole of right kidney, few similar type lesion also noted adjacent to this lesion. Largest lesion present at the anterior abdominal wall measures 5.9x5.1x4.2cm. Infiltrating adjacent peritoneal cavity, peritoneal deposit along sigmoid colon meaures 2.8x2.3cm. Bilateral inguinal hernia also seen. Few subserosal peritoneal deposit, largest along sigmoid colon 2.8 x 2.3cm were also reported. (*Fig. 1*)

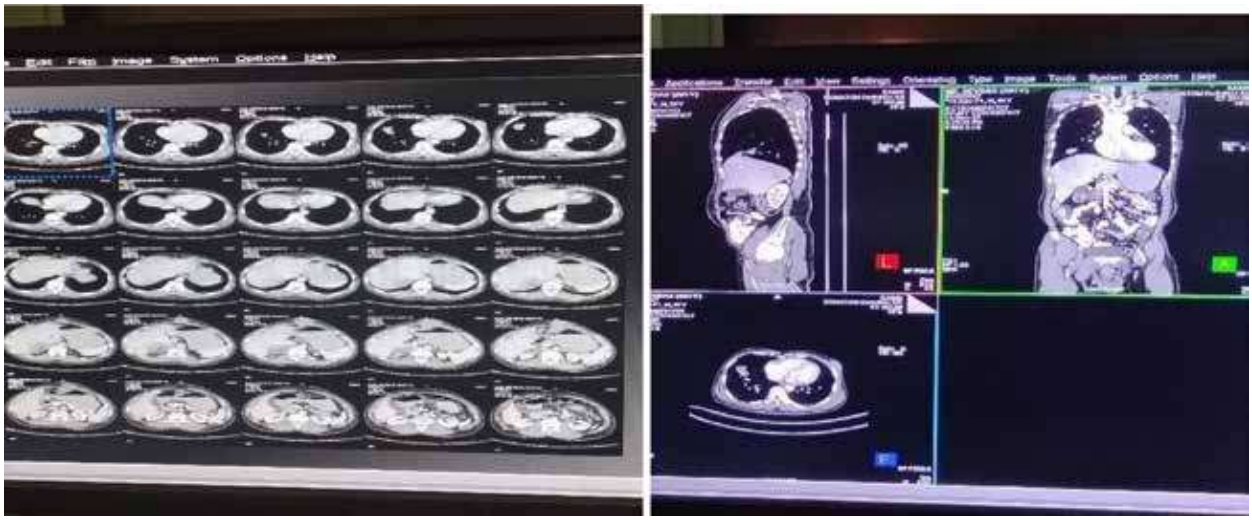

**Fig. 1:** CT chest and abdomen showing mass in right lower lobe and right suprarenal lesion

On physical examination around 4x 5 cm lump was present over left inframammary region, firm to hard, mobile, no local rise in temperature, skin not involved. Lump over epigastric region around 3x4 cm, fixed to skin, soft to firm, no local rise in temperature abdominal examination revealed soft, tenderness present in epigastric & right hypochondrium region. Post-op scar present on right side (appendectomy done). No inguinal node palpable. No bony tenderness. Fine needle aspiration cytology from mass in right chest wall was reported as metastatic round cell tumor.

Patient received one cycle of chemotherapy with etoposide & cisplatin and later patient came after 10 months with disease progression. On examination lump over left chest wall has progressed and now is 6x5 cm hard fixed, tender along with 1x1cm mobile, non tender nodular swelling present at left infra scapular region. New lump of size 3x2 cm non tender, mobile, hard, subcutaneous nodule present over left upper thigh. Left medial supraclavicular lymph node 2x1 cm hard fixed nontender. This time CT Guided biopsy was taken from right suprarenal mass. Histopathology (*Fig. 2*) from this was reported as malignant round cell tumor. Patient received two cycles of chemotherapy with etoposide and cisplatin but there was no response and he developed a new lump when he reported for 3rd cycle of chemotherapy. Sub cutaneous swelling over left chest wall was seen 6x5 cm firm to hard, no local rise in temperature, skin involved, fixed to chestwall, tenderness present. Left supraclavicular

lymph node was 1x1 cm, non tender, hard fixed. Right suprascapular mass 4x3 cm, firm to hard, fixed no local rise in temperature. As disease was progressing IHC wasdone and FLI1, SOX 10 and SX100, HMB 45 and Melan were positive which confirmed malignant melanoma. (*Fig. 3*) Patient was then planned for chemotherapy with dacarbazine 375mg day 1-5 along with immunotherapy with Pemrolizumab. He refused for Immunonotherapy hence only Dacarbazine was given.

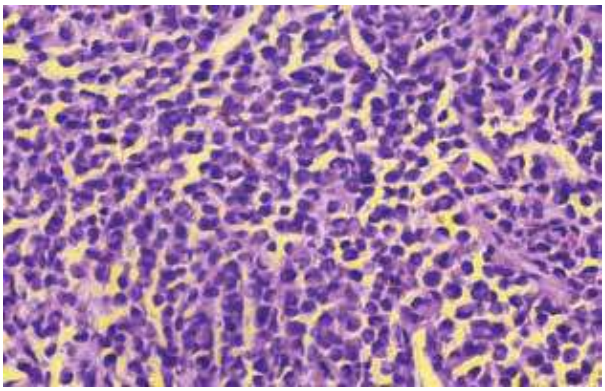

**Fig. 2:** Histopathological examination from the Right suprarenal mass

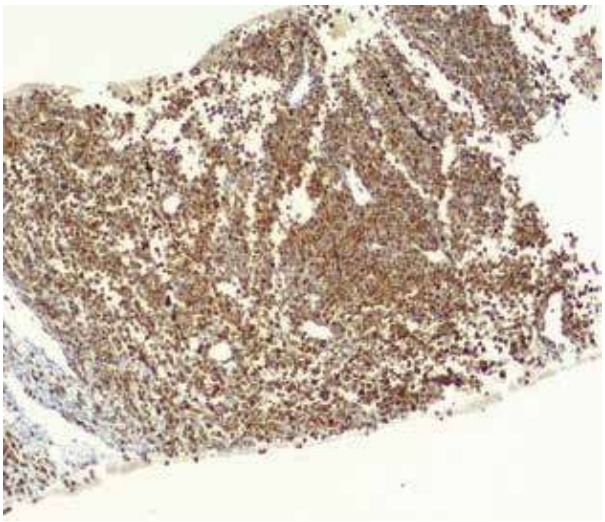

**Fig. 3:** Positive FLI1, HMB 45, SOX 10 & 100 on immunohistochemistry

## DISCUSSION

Malignant melanomas are known to be aggressive tumour with frequent metastasis to lymph nodes and viscera.[3] Malignant melanoma usually present with features like asymmetry, border: irregular, ragged, notched, or blurred edges, colour: nonuniform or variegated, diameter: larger than 6 millimeters, evolving: changes in size, shape, or color, familial factor: history of familial involvement but patient presented with symmetrical lump with well defined margin, no colour change, size was 6-7 cm, no changes in size, shape or colour with time. However patients presenting with melanomas with no known primary source is relatively rare. In such situations it is often difficult to distinguish whether the lesion is arising primarily from the cutaneous or is a metastasis from an unknown primary.[4] Melanomas with an unknown primary (MUP) seem to have a better prognosis as compared to those with a known primary.[5] metastatic malignant melanoma with an unknown primary is a known entity with an incidence of 3.2% of all cases of malignant melanoma with a higher incidence in males and usually presenting in older age groups, mainly the fourth to fifth decade.[6] Several theories have been proposed to explain the absence of a primary lesion in these patients, including spontaneous regression of the primary due to immune mechanisms, de novo origin of melanomas in tissues lacking melanocytes and unrecognised primary lesion.[6] Of these, spontaneous regression of the primary lesion is most commonly reported and has been purported to be the most feasible explanation for the phenomenon of MUP.[7] It has also been said that these same immune mechanisms may be responsible for the slightly improved survival seen in patients of MUP, when compared to metastatic melanoma with a known primary.[3] dasgupta *et al.*, in their study of MUP used certain criteria for inclusion, including absence of history of excision of any skin or anal lesion, a negative ophthalmologic and dermatologic clinical examination, and an absence of scars in the region of affected draining nodal basin.[8] these criteria were met with in this case, with no lesions seen at any other site than those described in the case report. Kamposioras *et al.*, have formulated a protocol for the recommended method of examination and diagnosis of these cases.[6] histopathological diagnosis of the excised tissue needs to be confirmed using immunostainslike S-100 protein, HMB-45 and Melan-a, vimentin, FLI1, SOX10 & SOX 100.

Since a routine hematoxylin and eosin (H and E) examination may lead to a differential diagnosis of round cell tumor. IHC markers were used in the examination of tissue in this patient to confirm the diagnosis. Evaluation of patients suspected to have MUP includes imaging such as computed tomography (CT) or scanning to determine the extent of metastatic disease.

Treatment options for patients of MUP include surgery, immunotherapy, chemotherapy and radiation. Most adjuvant treatments are performed

in the setting of clinical trials.[6] The patient in this case was treated with chemotheraphy, since, if feasible, it has been shown to be the most appropriate treatment for metastatic melanoma. The survival benefit is seen especially in patients with metastatic disease localized to single lymph node basins, treated by radical lymphadenectomy of that nodal basin. Most patients with MUP present with nodal metastasis. Visceral metastases portend a poorer survival and a higher risk of relapse. Barth *et al*., report a median survival ranging from 24–127 months in patients with nodal disease, as compared to a range of 3–13. 2 months in patients with visceral metastasis.[9] Occasional long term survival has been reported.[10] Relapse rates are high (45–65%), with most recurrences occurring within 2 years of treatment.[6]

## CONCLUSION

The unusual presentation of our case validates the immunohistochemical confirmation required for histopathological examination. As the round cell tumour which do not respond to primary treatment protocol must be subjected to immunohistochemical examination.

***Conflict of Interest:*** No conflict of interest

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***Ethics Declaration:*** No ethical issues involved

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