



A CASE OF ADVANCED ACRAL MELANOMA: A RARE CASE REPORT

Surgery

Dr. Sudip Paul	Post Graduate Trainee, Department of General Surgery, Bankura Sammilani Medical College and Hospital, Bankura, 722102
Dr Arnab Mandal	Associate Professor, Department of General Surgery, Bankura Sammilani Medical College and Hospital, Bankura, 722102
Dr. Soumen Pratihari	Post Graduate Trainee, Department of General Surgery, Bankura Sammilani Medical College and Hospital, Bankura, 722102
Dr. Mageswaran	Post Graduate Trainee, Department of General Surgery, Bankura Sammilani Medical College and Hospital, Bankura, 722102
Dr. Debayan Ganguly	Post Graduate Trainee, Department of General Surgery, Bankura Sammilani Medical College and Hospital, Bankura, 722102
Dr Sinjini Pan	Post Graduate Trainee, Department of General Surgery, Bankura Sammilani Medical College and Hospital, Bankura, 722102
Dr. Subhabrata Das	Professor, Department of General Surgery, Bankura Sammilani Medical College and Hospital, Bankura, 722102

ABSTRACT

Though Melanoma is a relatively common cancer world-wide, it is much less common in India, in terms of relative incidence, amongst cancers. Aggressiveness of this lesion is manifested by early spread to lymph nodes, and sometimes (less commonly), usually small, in-transit metastases, between the original lesion and the regional lymph nodes. We report a case of Melanoma in a 40 year old male, with upper limb melanoma and very large, striking in-transit metastases.

KEYWORDS

UV= ultra violet, MRI= Magnetic Resonance Imaging, FNAC= Fine Needle Aspiration Cytology, CT= Computed Tomography.

INTRODUCTION:

Melanoma arises from melanocytes, which reside between the strata spinosum and basale. Aetiopathogenesis is commonly related to U-V radiation^{[1][2]}, immunodeficiency^[3], genetic predisposition^[4], etc.

Legs are most commonly affected in women, and, the back, in men^[5]. Around 25% arise from pre-existing moles^[5]. Spread occurs through lymphatics and blood, with, occasionally, characteristic in-transit lymphatic metastases. Survival rates decrease significantly with advancement of disease^[6] and surgery is the mainstay of treatment^[3].

Case presentation:

Our patient, a poor, 40-year old male, labourer, presented with complaints of two, dark-colored progressive, painless swellings, with some darkish surface discharge, in the right upper limb, developing over a period of 3 months. The lesions appeared spontaneously and were initially small, nodular, and blackish-brown in colour. The first appeared on the dorsum of the hand and the second appeared a month later, on the dorso-lateral side of the upper forearm. On questioning, he said that he had had, a pigmented skin lesion near the tip of his right middle finger, with a small, but non-healing ulcer, on it, for 1 year, following an injury to the finger-tip. There were no complaints of fever, other lumps, loss of body weight or other constitutional symptoms.



Fig 1: 2 lumps at right hand

Examination revealed a pigmented scar at the tip of right middle finger. 2 lumps were observed at the sites mentioned (Fig. 1). The distal lump, around 4cm in diameter, extended from the dorsum of the right third web space, proximally on to the dorsum of the hand. The other was around 5cm distal to the lateral condyle, around 8cm by 5cm in dimension. The lumps were variegated, with cystic and firm areas, irregularly pigmented, with black and brown areas, with patchy skin

exfoliation. Clinically, there was no gross fascial/muscular involvement. During the hospital stay, one of the cystic areas in one of the nodules ruptured, with a blackish serous discharge. One right epitrochlear lymph node was palpable (>1cm) and multiple right axillary lymph nodes too, were palpable in the lateral and central groups. There was local oedema and deformity of the hand and fingers. A new lesion had appeared on the ventral surface of right upper forearm after admission; it was a 2 by 1cm plaque, with an appearance similar to the previous lesions.

MRI of right upper limb revealed subcutaneous lesions at the sites mentioned, showing intermediate signal intensity on T1W settings and mild heterogenous signal hyper-intensity on T2W/STIR settings. Visualized bones, muscles and vascular structures were grossly normal, and the impression was of a soft-tissue neoplasm. FNAC (Fig. 2) and Core-needle biopsy from the lesion reported "many isolated, small, clusters of pleomorphic spindle to oval cells, with hyperchromatic nuclei, prominent nucleoli, with scanty cytoplasm and both intra and extra cellular pigments (?melanin). This was suggestive of melanoma and was confirmed by incisional biopsy. CT of the abdomen and thorax revealed no malignant spread. Routine reports were normal, barring mild anaemia.

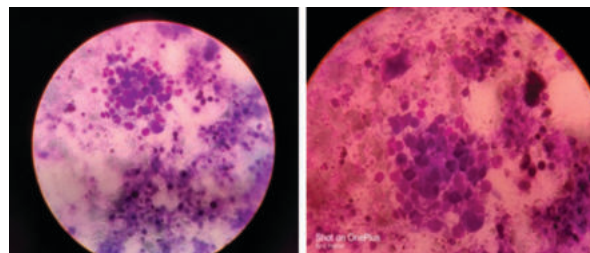


Fig 2: FNAC from the swellings

The patient had been reviewed by Dept. of Radiotherapy and, amputation, followed by chemotherapy, was suggested. Though fore-quarter amputation of right upper limb was considered, on refusal of consent by the patient, this was restricted to an above-elbow amputation, with right axillary dissection. The procedure went off uneventfully but the appearance of multiple axillary lymph nodes

which had become absolutely black due to involvement by melanoma, was remarkable.(Fig.3).

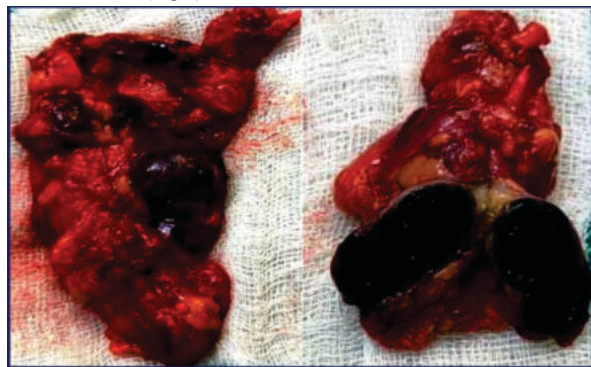


Fig 3: Striking appearance of axillary nodes

The patient recovered without any immediate complications. Postoperative histopathology revealed Clark Level 5, involvement in both lesions, with high mitotic count and lympho-vascular invasion; nodal involvement was confirmed.

DISCUSSION:

Melanoma is a rare skin cancer, compared to Squamous Cell and Basal Cell Carcinomas, particularly in India^{[7][8]}. Other possible differentials include Soft tissue Sarcoma, Pigmented Schwannoma, Clear cell Sarcoma, Lymphangiomyoma, Neurofibroma, etc. While, both blood-borne and lymphatic metastases are common, in-transit nodules between the primary lesion and the draining regional lymph-nodes are characteristic, and attest to the aggressiveness of the disease. As a pre-existing mole is the site of the disease in up to 25% cases^[1], the possibility of early lesions being missed or ignored, is obviously significant, particularly in dark-skinned individuals. Our, unfortunate patient, initially ignored the lesion, thinking it to be bruising due to coincidental trauma.

Though characteristic, the incidence of in-transit metastases in melanoma, is only 4% to 6%^[9]. These are considered as distinct from satellite lesions which are those lying close to the primary lesion (2-3cm^[10]). Further most lesions are small, being less than 2cm in diameter ^[11] In-transit lesions, indicate poorer prognosis and also complicate surgical planning^[9]. Our patient had remarkably bulky, striking, in-transit lesions.

Lymph-node involvement also heralds poorer prognosis^[9] and our patient had significant nodal involvement (6/26 nodes showed deposits)

CONCLUSION:

Melanomas are relatively less common, but more lethal form of skin cancer, in our country. Lack of awareness, the high frequency of benign moles, and naturally dark skin, in the population, may all combine to delay early diagnosis. In-transit nodules should be a good pointer to an alert primary-care clinician, but indicate an already advanced disease. The intent of presenting this case is to share images of very uncommon but characteristic, in-transit lesions and the dramatic appearance of involved nodes.

REFERENCES:

1. World Cancer Report (PDF). World Health Organization. 2014. pp. Chapter 5.14. ISBN 978-9283204299. Archived (PDF) from the original on 2014-05-30.
2. Kanany HE, Gerstenblith MR (December 2011). "Ultraviolet radiation and melanoma". *Seminars in Cutaneous Medicine and Surgery*. 30 (4): 222–8.doi:10.1016/j.sder.2011.08.003. PMID 22123420.
3. Melanoma Treatment HYPERLINK <http://www.cancer.gov/types/skin/hp/melanoma-treatment-pdq> HYPERLINK <http://www.cancer.gov/types/skin/hp/melanoma-treatment-pdq> HYPERLINK <http://www.cancer.gov/types/skin/hp/melanoma-treatment-pdq> HYPERLINK <http://www.cancer.gov/types/skin/hp/melanoma-treatment-pdq> HYPERLINK <http://www.cancer.gov/types/skin/hp/melanoma-treatment-pdq> HYPERLINK <http://www.cancer.gov/types/skin/hp/melanoma-treatment-pdq> "for health professionals". National Cancer Institute. June 26, 2015. Archived from the original on 4 July 2015. Retrieved 30 June 2015.
4. Azoury SC, Lange JR (October 2014). "Epidemiology, risk factors, prevention, and early detection of melanoma". *The Surgical Clinics of North America*. 94 (5): vii, 945–62. doi:10.1016/j.suc.2014.07.013. PMID 25245960.
5. World Cancer Report (PDF). World Health Organization. 2014. pp. Chapter 5.14. ISBN 978-9283204299. Archived (PDF) from the original on 2014-05-30.
6. "SEER Stat Fact Sheets: Melanoma of the Skin". NCI. Archived from the original on 2014-07-06.
7. S.A. Shishak1, S. Rastogi2, R. Pandey3, A. Barwad4, E. Dhamija5, A. Aggarwal6, K. Kalra7, S.A. Shamim8, M. Parisa2ABSTRACTS Malignant melanoma: A study of clinical profiles and treatment outcomes in Indian patients MELANOMA AND OTHER

- SKIN TUMOURS*) VOLUME 30, HYPERLINK [https://www.annalsofoncology.org/issue/S0923-7534\(19\)X9000-6](https://www.annalsofoncology.org/issue/S0923-7534(19)X9000-6)HYPERLINK [https://www.annalsofoncology.org/issue/S0923-7534\(19\)X9000-6](https://www.annalsofoncology.org/issue/S0923-7534(19)X9000-6)HYPERLINK [https://www.annalsofoncology.org/issue/S0923-7534\(19\)X9000-6](https://www.annalsofoncology.org/issue/S0923-7534(19)X9000-6)
- org/issue/S0923-7534(19)X9000-6*"HYPERLINK [https://www.annalsofoncology.org/issue/S0923-7534\(19\)X9000-6](https://www.annalsofoncology.org/issue/S0923-7534(19)X9000-6)"HYPERLINK [https://www.annalsofoncology.org/issue/S0923-7534\(19\)X9000-6](https://www.annalsofoncology.org/issue/S0923-7534(19)X9000-6)"HYPERLINK [https://www.annalsofoncology.org/issue/S0923-7534\(19\)X9000-6](https://www.annalsofoncology.org/issue/S0923-7534(19)X9000-6)"HYPERLINK [https://www.annalsofoncology.org/issue/S0923-7534\(19\)X9000-6](https://www.annalsofoncology.org/issue/S0923-7534(19)X9000-6)"HYPERLINK [https://www.annalsofoncology.org/issue/S0923-7534\(19\)X9000-6](https://www.annalsofoncology.org/issue/S0923-7534(19)X9000-6)"HYPERLINK [https://www.annalsofoncology.org/issue/S0923-7534\(19\)X9000-6](https://www.annalsofoncology.org/issue/S0923-7534(19)X9000-6)
- Lahani S, Asthana S, Rathore K, Sardana K. Incidence of melanoma and nonmelanoma skin cancers in Indian and the global regions. *J Cancer Res Ther.* 2021 Jul-Sep;17(4):906-911. doi: 10.4103/jcrt.JCRT_785_19. PMID: 34528540.
- From: Plastic Surgery - Principles and Practice, 2022 Tara C. Mitchell, Lynn Schuchter, in *Abeolf's Clinical Oncology* (Sixth Edition), 2020
- Orlando Catalano I Corrado Caracò D Nicola Muzzillo D Alfredo Siiani L Coregional Spread of Cutaneous Melanoma: Sonography Findings AJR:194, March 2010
- Solivetti FM, Di Luca Sidozi A, Pirozzi G, Coscarella G, Brigida R, Eibenschutz L. Sonographic evaluation of clinically occult in-transit and satellite metastases from cutaneous malignant melanoma. *Radiol Med.* 2006 Aug;111(5):702-8. English, Italian. doi: 10.1007/s11547-006-0067-7. Epub 2006 Jun 29. PMID: 16791462