PICTURE STORY

From a blackened birthmark to the blooming brain

Mythily Aravinthan[1], Vihangi Fernando[1], Chandu De Silva[2], Shyam Fernando[1,3], Janaka Akarawita[4], Prasad Katulanda[1,3]

[1] Professorial Medical Unit, National Hospital of Sri Lanka

[2] Department of Pathology, Faculty of Medicine, University of Colombo

[3] Department of Clinical Medicine, Faculty of Medicine, University of Colombo

[4] National Hospital of Sri Lanka

Article Information

Total number of
Words 511
Figures 5

Authors have no conflicts of interest to declare

Date of submission: 2021-05-06
Date of acceptance: 2021-06-29

Author responsible for correspondence:
Mythily Aravinthan
Professorial Medical Unit, National Hospital of Sri Lanka, Colombo, Sri Lanka
Postal Address, 26 6/1, Moor Road, Colombo 06
Email: mailmythi@gmail.com

DOI: http://doi.org/10.4038/cjms.v57i1.4988

https://orcid.org/0000-0002-4601-6134

Background

Malignant melanoma has a prevalence of about 1.52 per 100,000 population in Sri Lanka according to the WHO cancer fact-sheet 2020 [1]. Melanoma warrants complete surgical cure by simple excision when diagnosed early. However, prognosis rapidly declines with metastatic disease. We present a picture story of a patient with metastatic malignant melanoma which was missed at the onset because the lesion developed from a congenital melanocytic naevus over his back.

Case vignette

A 71-year-old male, sand-miner by profession, was brought by the family due to worsening confusion and ill-health over the preceding 2 months. Thorough examination revealed an apathetic fair-skinned man with generalized lymphadenopathy, multiple skin nodules over the chest and back suggestive of 'sebaceous cysts' (Figure 1) and an irregular shaped, variegated naevus over the back

Figure 1. Multiple subcutaneous nodules mimicking sebaceous cysts the neck and chest wall.

(Figure 2) which had been there since birth but the family claimed to have noted recent enlargement. The right axillary lymph-node was noted to be pigmented during the excision biopsy (Figure 3). Due to the new onset cognitive decline and confusion a non-contrast CT brain was performed which showed multiple hyperdense and 'ring-enhancing-like' lesions with significant perilesional oedema (Figure 4). Histological analysis of the excision biopsied lymph-node and the skin nodules confirmed the diagnosis of metastatic malignant melanoma (Figure 5). Serum lactate dehydrogenase (LDH) level was 1050 IU/l. The patient was referred to the oncology team for immuno-therapy. The patient passed away during oncological treatment due to pneumonia.

Figure 3. The excision biopsy specimen of the right sided pigmented axillary lymph node.

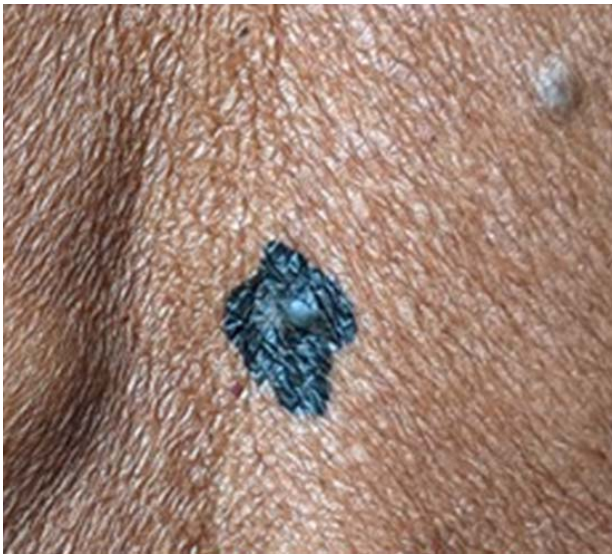

Figure 2. The irregular shaped, variegated lesion over the back of the chest.

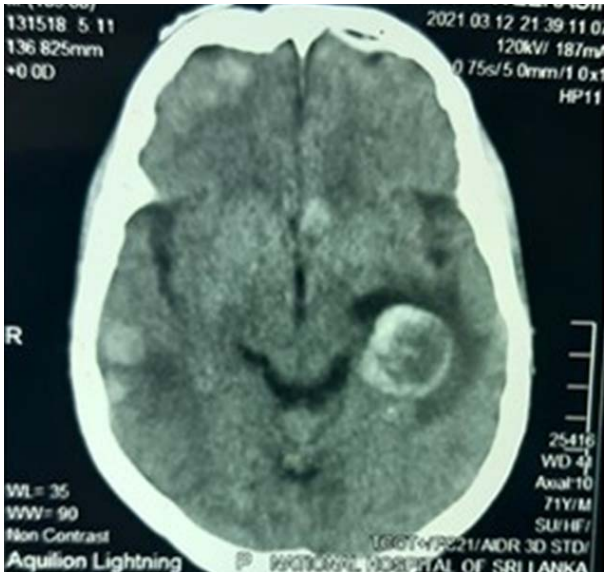

Figure 4. The Non-contrast CT brain showing ring-enhancing-like hyperdense lesions.

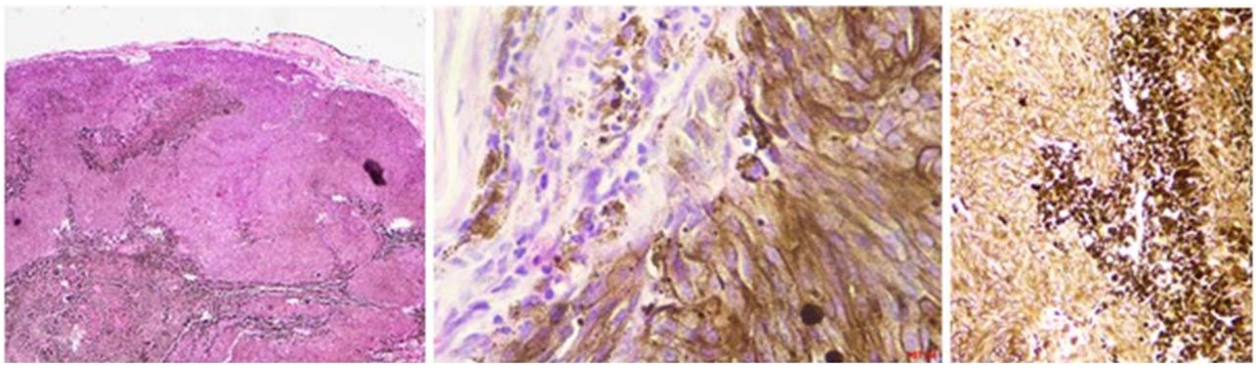

Figure 5. H & E (left) and MART (middle and right) appearance of the histology specimen of the lymph node.

Discussion

Malignant melanoma (MM) can spread to any organ in the body. Lymph nodes are the earliest site of spread followed by skin. Skin deposits can mimic a number of benign skin conditions. Above patient's skin deposits mimicked multiple sebaceous cysts at first impression, partly due to the inherent bluish hue of the sebaceous cysts but were histologically confirmed as metastatic deposits. Brain metastasis confer the worst prognosis in MM along-with serum LDH level. The interesting contrast-enhanced appearance of melanoma brain deposits in Non-contrast CT brain is due to the common occurrence of haemorrhage in these lesions. In certain cases, there is no active haemorrhage at diagnosis but the hyperdensity in the imaging is due to previous bleeding causing haemo-siderin deposition and not the presence of melanin [2].

Although the median time from onset to distant metastasis is 25 months [3], diagnosis is often delayed because of hidden sites of primary lesion including head, neck or back as in this case, and lack of awareness among patients about self-examination for concerning skin lesions and sinister signs to look for in a longstanding naevus. Another contributory factor is the lack of knowledge among non-dermatology medical practitioners about total body examination for skin cancer in Sri Lanka, according to a cross-sectional study by Herath et al in 2018 [4]. The authors emphasize the importance of thorough clinical examination as the single most important diagnostic clue in a patient presenting with non-specific symptoms, which cannot be replaced by any investigation in solving the clinical problem at the earliest.

Acknowledgement

The authors acknowledge the timely surgical excision done by Dr. Sanjeewa Seneviratne (Consultant Surgeon, National Hospital of Sri Lanka).

References

1. Globocan (2020). Sri Lanka – The Global Cancer Observatory. Accessed on: 3rd May 2021. Available at: <https://gco.iarc.fr/today/data/factsheets/populations/144-sri-lanka-fact-sheets.pdf>
2. Ginaldi S, Wallace S, Shalen P, Luna M, Handel S. Cranial computed tomography of malignant melanoma. *American Journal of Roentgenology* 1981; 136(1): 145-9.
3. Zbytek B, Carlson JA, Granese J, Ross J, Mihm M, Slominski A. Current concepts of metastasis in melanoma. *Expert Review of Dermatology* 2008; 3(5): 569-85.
4. Herath HMMTB, Keragala BSDP, Udeshika WAE, *et al.* Knowledge, attitudes and skills in melanoma diagnosis among doctors: a cross sectional study from Sri Lanka. *BMC Res Notes* 2008; 11: 389. doi: 10.1186/s13104-018-3499-y