



## Case Report

# Recurrent Melanoma Inguinal Lymph Node as unknown Primary Disease: A Case Report

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## Abstract

*A-63-year old male presented with left inguinal swelling. Swelling was non-tender and firm in consistency. It measured 5×3×1 cm. Fine needle aspiration cytology was done. Smears were stained by H&E and Papanicolaou staining methods. Smears were hypercellular and showed plasmacytoid cells. Nucleomegaly and anisonucleosis were seen. Clumped chromatin with single conspicuous nucleolus was also seen. The patient had a recurrent lesion and cytological atypia. Cytological findings suggested the tumour to be a malignant melanoma.*

**Keywords:** *Malignant tumour, Groin swelling, Cytoplasmic melanin pigment granules.*

## Introduction

In the year 2019 about 96000 cases of malignant lymphoma with ~7000 deaths were reported in USA <sup>[1]</sup>. Moreover, recurrences were reported in 291 of 403 (72%) of melanoma patients at single site with median survival of 11 months<sup>[2]</sup>. Those with non-visceral recurrence (n=190) had higher

mean survival of 18.5 months as compared with those with visceral recurrence (n=101) of 6 months<sup>[2]</sup>. Later, another case with extremely rare amelanotic melanoma was reported from Japan <sup>[3]</sup>. Later case was a 65-year-old male patient. He was successfully treated with 10 cycles of nivolumab (anti-PD-1) antibody. In addition,

male/female ratio was 1:3<sup>[4]</sup>. Furthermore, Melanoma might develop in a lymph node as a metastatic lesion without any primary disease. Herewith, we describe a case of recurrent malignant melanoma in the inguinal area.

### Case Report

A 63-year-old male patient presented with a left inguinal swelling in January 2022. Subsequently, the swelling was excised. Recently, the swelling recurred at the same site after 9 months. At present, the swelling measured 5×3×1 cm. It was firm and non-tender. Fine needle aspiration was

done. Haematoxylin eosin (HE) and Papanicolaou stainings were done. Smears were hypercellular and showed a dispersed population of atypical plasmacytoid cells. Atypical melanocytes had clumped chromatin and a prominent conspicuous nucleolus. Nuclei were round-to-oval in shape. Nucleomegaly was seen. Anisonucleosis was also seen. In addition,

several binucleated cells with frequent mitoses were also seen. In addition, tumour cells had cytoplasmic dispersed coarse brown melanin pigment granules (Figure 1).

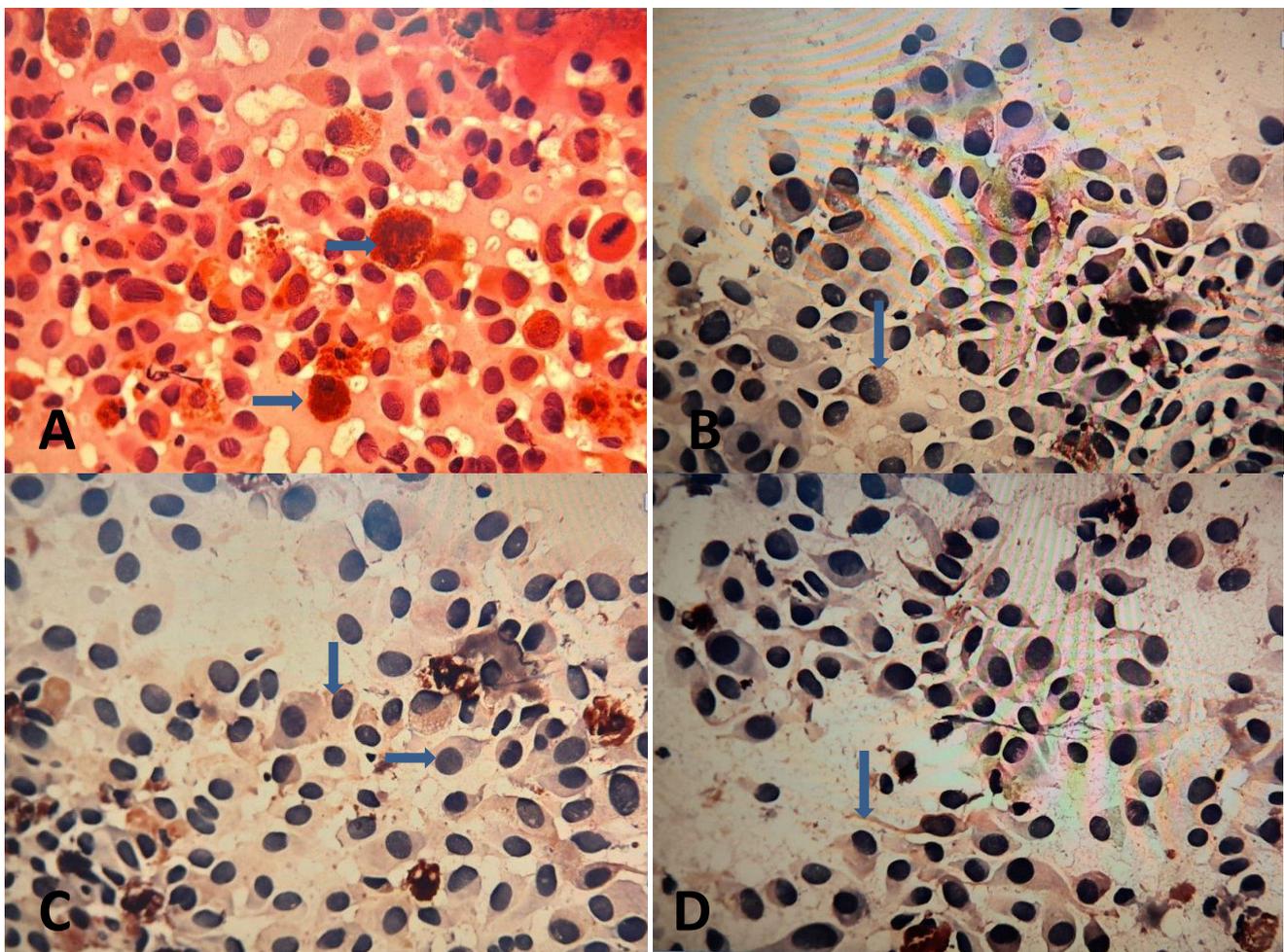


Figure 1: (A) Photomicrograph shows large number of atypical tumor cells. Nucleomegaly and anisonucleosis are seen. Cytoplasm of tumor cells contain large amount of melanin pigment (HE×400). ((B), (C) and (D)) Photomicrographs show melanin pigment granules in three different areas of smear (Papanicolaou stain ×400). Tumor cells with granules may be identified with

## Discussion

Due to presence of cellular atypia, the tumour appeared to be a malignant neoplasm. Approximately, 3% of cells in basal layer of epidermis might be melanocytes. Tumour might have originated from one of the melanocytes as a primary neoplasm. Another possibility might be its origin elsewhere from a visceral organ. Later, a metastatic tumour might have developed in a regional inguinal lymph node. Another possibility might be the congenital persistence of an ectopic melanocyte in inguinal lymph node from which melanoma might have developed in adult life [5]. Furthermore, nevi were known to persist in lymph nodes [6]. Malignant melanoma might have developed from one of these cells.

Another peculiarity of present case was the recurrence of tumour at the same site in left inguinal region. Some patients with >2 inguinal nodal metastases had >50% probability of local recurrence [7]. However, in the present case, single node was detected in inguinal region alone and pelvic nodes were not detected. In another study, wound infection rate was higher after inguinal lymphadenectomy when compared with axillary lymphadenectomy patients. Moreover, lymph edema was also more common in post-inguinal lymphadenectomy cases when compared with axillary lymphadenectomy patients [8]. It was advised to follow ilioinguinal dissection in patients with palpable inguinal lymph node metastasis. It has been proposed to identify patients with low and high-risk of recurrence based on the visceral extranodal disease, extent of nodal involvement and number of nodes involved at the primary site. Further, melanoma patients with high-risk subgroup might be offered participation in adjuvant trial. Adjuvant treatment comprised of dicarbazine, cyclophosphamide, vincristine and alpha interferon. In addition, there was a subset of melanoma patients who might present as recurrence after 10 years or more after previous treatment. However, 50% of melanoma patients reported as recurrence after 8 months of

disease-free period [9]. Moreover, videoscopic inguinal lymphadenectomy appeared to be a minimally invasive approach with minimal complications [10,11].

## Conclusion (S)

A 63-year-old male patient presented with an left inguinal lymph node swelling. He was operated. Previous history of tumour occurring at the same site, cytologic atypia and presence of cytoplasmic coarse brown melanin pigment granules suggested the tumour to be a malignant melanoma.

**Financial support and sponsorship:** Nil

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