

**LIVER METASTASIS OF MELANOMA OF UNKNOWN PRIMARY TUMOR: A CASE REPORT****Layla Ben Youness\*, Mohamed Saadoun, Mouna Darfaoui, Issam Lalya, Abdelhamid Elomrani and Mouna Khouchani**

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Article Received on 25/12/2020

Article Revised on 15/01/2020

Article Accepted on 05/02/2021

**ABSTRACT**

The natural history of metastatic melanoma in liver in the absence of a known primary site (MUP) has been defined poorly, thus, treatment guidelines for patients with MUP are not clear-cut. A 70-year-old male patient, with no prior history, The symptomatology began 1 year ago by the gradual installation of isolated asthenia gravis without anorexia or weight loss and without other signs of digestive, pulmonary or cutaneous appeal. The pelvic abdominal chest CT found a liver with multiple nodular lesions, after biopsy of this lesions the anatomo-pathological study a morphological and immunohistochemical aspect of melanoma the rest of the investigation did not object to any abnormalities, notably digestive endoscopy. the diagnosis is retained of MUP. A palliative chemotherapy is started with dacarbazine which led to a stability of lesions after one year of follow-up. he relatively favorable long-term survival of patients with MUP in the current study suggested that patients with MUP have a natural history that is similar to (if not better than) the survival of many patients with Stage III disease.

**KEYWORDS:** Melanoma, liver metastasis, unknown primary tumor.**INTRODUCTION**

An Unknown Primitive Melanoma (MUP) is defined as a diagnostic melanoma on a secondary lesion without a recovered primary lesion and is immediately considered a metastatic melanoma.

**Case presentation**

We report the observation of a patient aged 67 years, with no prior history, The symptomatology began 1 year ago by the gradual installation of isolated asthenia gravis without anorexia or weight loss and without other signs of digestive, pulmonary or cutaneous appeal, The somatic examination found a patient in good general condition, not icteric, with at the cutaneous examination the presence at the level of the back of some nodules not exceeding 3 mm and not suspect, 5mm high, soft, achromic naevus that have evolved since childhood without suspicion of malignancy, 5 mm erythmato-squamous lesion on the right forearm that has appeared for more than a year without evolutionary appearance and without signs of infiltration, the rest of the clinical examination was without abnormalities. The X-ray examination included a chest-abdominal-pelvic scanner which found a liver full of multiple nodular lesions (about fifteen), fluid and tissue density heterogeneously rising after contrast injection, the largest measuring 46\*43mm (segment II) and 48\*30mm (segment IV), without any other remote lesions. An echo-guided biopsy was carried out, with the anatomo-pathological study a

morphological and phenotypic aspect of a liver localization of malignant melanoma. A high and low gastrointestinal endoscopy was performed, but no primary tumors were detected, thorough dermatological examination and ophthalmology were without abnormalities. the diagnosis is retained of MUP. A palliative chemotherapy is started with dacarbazine. The patient received 4 cures with good clinical response and radiological stability. A therapeutic window is proposed with clinical and radiological stability after one year of follow-up.

**DISCUSSION**

The incidence of melanoma has increased significantly since 1980, however, there was a slight decrease in incidence and mortality from 2005 to 2012.<sup>[1]</sup> Malignant skin melanoma is the second leading cause of skin cancer. Other locations are also described such as the esophagus and female genito tract, however, primary hepatic melanoma is an extremely rare location.<sup>[2]</sup> The origin of primary hepatic melanoma is unclear because the liver lacks melanocytes. Some authors have suggested that these neoplasms originate from degenerated ectopic melanocytes.<sup>[3]</sup> An Unknown Primitive Melanoma (MUP) was first published in 1963 by Das Gupta et al.<sup>[4]</sup> Recent studies have shown that 2% and 6% of all malignant melanoma patients were considered as metastatic tumors of unknown primitive.<sup>[5]</sup> Due to the small number of studies conducted, there is no

standardized approach to retaining the diagnosis. However, Yu Zhang et al. propose three major and three minor criteria for retaining diagnosis after a literature review. The three major criteria are: histopathological confirmation of primary hepatic melanoma, no evidence of primary malignant melanoma from other sites, absence of unknown skin lesions or history of eye surgery. In addition, the three minor criteria are listed as follows: the occurrence in one site; the presence of lesions in several sites with at least one lesion greater than 5 cm in diameter; the absence of occult primary foci confirmed by the autopsy result.<sup>[2]</sup> Our patient has three major criteria and one minor criterion which can carry the diagnosis of primary malignant melanoma in his case. There is no typical clinical picture for this disease. Some images obtained by CT or MRI suggest the diagnosis of hepatic melanoma before the presence of a pseudocapsule around a liver mass, a slight predominance of arterial and portal venous pathways or a heterogeneous hyperintense lesion in T1 (Hypervascular tumor) and hypo-intense in T2. However, these imaging results only lead to a presumptive diagnosis of hepatic melanoma; histology and immunohistochemical staining remain the reference criteria for making the definitive diagnosis of melanoma.<sup>[6-7]</sup> The optimal treatment and prognosis of primary liver melanoma remain largely unknown. Surgical resection when possible, it is considered the best choice for treating isolated metastases of hepatic melanoma.<sup>[8-9]</sup> Stereotactic radiotherapy is an effective treatment to control metastatic melanoma with limited morbidity. It should be considered as a low-morbidity option in patients with oligometastatic melanoma where the majority of patients will obtain a complete metabolic response with a median of 2.8 months.<sup>[10]</sup> To date, no conventional treatment has proven effective in treating MHP. The National Comprehensive Cancer Network has suggested high doses of IL-2 as an advanced melanoma treatment of choice.<sup>[10]</sup> However, several new molecules targeted for treatments such as nivolumab and ipilimumab were applied in phase III trials with encouraging results.<sup>[11,12]</sup> In addition, some doctors have reported that surgical resection therapy followed by adoptive cell therapy has some benefits for malignant melanoma patients.<sup>[9]</sup> Prognosis for metastatic to unknown primary melanoma patients is relatively good, with a median survival of 4.9 years.<sup>[7]</sup>

## CONCLUSION

This observation confirms the need to establish a consensus for the management of MUP. In this patient population, more limited treatment efficacy associated with possible delayed diagnosis may explain their poorer prognosis.

## BIBLIOGRAPHY

1. Longvert C, Saiag P. Actualités dans le mélanome cutané. *Rev Med Interne*, 2018. <https://doi.org/10.1016/j.revmed.2018.11.005>(actuali

- tés dans le mélanome cutané (1) les cancers en France)
2. Fangjuan Du, Maowu Yang. Primary hepatic malignant melanoma: a case report. *Int J Clin Exp Pathol*, 2015; 8(2): 2199-2201.(Primary hepatic malignant melanoma: a case report)
3. Song EJ, Scolyer RA, Damian DL, Thompson JF: Primary oesophageal melanoma - a case report. *World J Surg Oncol*, 2014; 12: 77.
4. T.Das Gupta, L. Bowden, and J.W. Berg. Malignant melanoma of unknown primary origin. *Surgery, Gynecology & Obstetrics*, 1963; 117: 341-345.
5. Bostanci O, Kartal K. Case Report: Liver Metastases of Unknown Primary: Malignant Melanoma. *Case Reports in Hepatology*, 2014; 131708. (Liver Metastases of Unknown Primary: Malignant Melanoma).
6. Zhang et al.: Partial hepatectomy for primary hepatic melanoma: a report of two cases and review of the literature. *World Journal of Surgical Oncology*, 2014; 12: 362.
7. Mouchli et al.: An Enlarging Metastatic Calcified Liver Lesion of an Occult Melanoma. *Case Rep Oncol*, 2018; 11: 388-391.
8. Alvarez-Downing MM, Inchauste SM, Dudley ME, White DE, Wunderlich JR, Rosenberg SA, Kammula US: Minimally invasive liver resection to obtain tumor-infiltrating lymphocytes for adoptive cell therapy in patients with metastatic melanoma. *World J Surg Oncol*, 2012; 10: 113.
9. Wang M, Liu HF, Li YL. Primary Hepatic Melanoma in a Child. *Chin Med J*, 2018; 131: 2135-6.
10. Youland RS, Packard AT, Blanchard MJ, Arnett AL, Wiseman GA, Kottschade LA, et al. 18F-FDG PET response and clinical outcomes after stereotactic body radiation therapy for metastatic melanoma. *Adv Radiat Oncol*, 2017; 2(2): 204-10.