

## Cutaneous Metastasis From Hepatocellular Carcinoma After a Percutaneous Interventional Procedure<sup>☆</sup>



### Metástasis cutánea de hepatocarcinoma tras procedimientos percutáneos

To the Editor:

Cutaneous metastases from hepatocellular carcinoma are very uncommon, and, according to one series, account for just 0.8% of all cutaneous metastases.<sup>1</sup> Iatrogenic factors appear to be the most common cause and include needle tract seeding during percutaneous interventional procedures and surface seeding of tumor cells during surgery.<sup>2</sup>

We present the case of a 35-year-old man with a history of chronic hepatitis C virus infection with progression to cirrhosis. He was subsequently diagnosed with hepatocellular carcinoma, which was treated with concomitant radiofrequency ablation and percutaneous ethanol injections. A year after treatment, the patient presented with a subcutaneous nodule in the right costal region (Figure 1). The site of the lesion appeared to coincide with that of the radiofrequency needle tract. Computed tomography showed a large lesion consistent with progression of the hepatocellular carcinoma on the right abdominal wall, in addition to multiple intrahepatic metastatic masses (Figure 2). Skin biopsy confirmed that the cutaneous lesion was a metastasis from the hepatocellular carcinoma (Figure 3). Surgical treatment and chemoembolization were ruled out because of the size of the lesion. The patient was administered chemotherapy (sorafenib) and radiation therapy in the scar area, but died 5 months after diagnosis of the cutaneous metastasis.

Percutaneous interventional procedures have a very important role in the management of hepatocellular



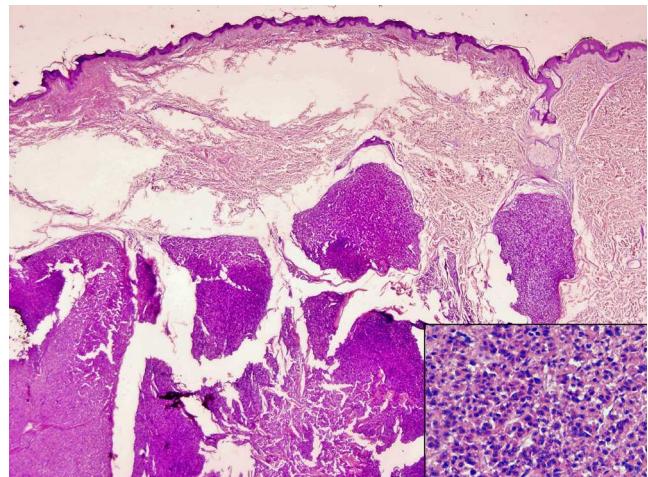
**Figure 2** Magnetic resonance imaging scan (gadolinium-enhanced fat-saturated T1-weighted image). Metastatic lesion on the right abdominal wall adjacent to the lower pole of the liver (\*) with cutaneous involvement (\*\*).

carcinoma and are widely used in this setting.<sup>3,4</sup> The main procedures are fine-needle aspiration biopsy, percutaneous ethanol injections, and radiofrequency ablation.<sup>3,4</sup> These procedures are generally considered to be safe, and while various complications have been described, they are uncommon, can mostly be managed conservatively, and are associated with low mortality.<sup>3,4</sup>

Needle tract seeding in hepatocellular carcinoma is an exception. While very rare, it can occur throughout follow-up and alters prognosis.<sup>4</sup> Needle-tract implantations generally appear as a single or few round or oval nodules along the tract of the needle, which extends from the intraperitoneal region to the skin or subcutaneous tissues through the abdominal or intercostal muscles.<sup>4</sup>



**Figure 1** Subcutaneous nodule on the right side.



**Figure 3** Excisional skin biopsy (hematoxylin-eosin, original magnification X40). Infiltration of the dermis and adipose tissue by hepatocellular carcinoma. Contact with the deep surgical margin.

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The overall incidence of tumor seeding (considering all techniques) ranges from 0.5% to 1%, with rates varying slightly according to the technique used.<sup>4</sup> In most studies, the reported incidence is less than 2%.<sup>5</sup>

Several hypotheses have been proposed to explain how tumor cells are disseminated along the needle tract.<sup>4</sup> The first is that viable tumor cells adhere to the needle and break off as this is being removed. The second is that tumor cells might be carried to the surface of the skin during the reflux of blood or other fluids up the needle tract, and the third is that tumor cells might enter the tract due to a sudden increase in intratumoral pressure, as commonly occurs during radiofrequency ablation.<sup>4</sup>

A conservative approach is taken in most cases, as many patients are already in the terminal stages of their disease when the metastases are detected. Surgical excision, however, is sometimes performed. When this is not possible, because of advanced disease, low performance status, or other reasons, radiation therapy appears to be a reasonable alternative.<sup>2</sup>

In conclusion, needle tract seeding in percutaneous interventional procedures are very rare, but are the most common cause of cutaneous metastases from hepatocellular carcinoma.

## References

1. De Agustín P, Conde E, Alberti N, Pérez-Barrios A, López-Ríos F. Cutaneous metastasis of occult hepatocellular carcinoma: A case report. *Acta Cytol.* 2007;51:214–6.
2. Tezcan Y, Koc M. Hepatocellular carcinoma with subcutaneous metastasis of the scalp. *Radiol Oncol.* 2011;45:292–5.
3. Ahn DW, Shim JH, Yoon JH, Kim CY, Lee HS, Kim YT, et al. Treatment and clinical outcome of needle-track seeding from hepatocellular carcinoma. *Korean J Hepatol.* 2011;17:106–12.
4. Chang S, Kim SH, Lim HK, Kim SH, Lee WJ, Choi D, et al. Needle tract implantation after percutaneous interventional procedures in hepatocellular carcinomas: Lessons learned from a 10-year experience. *Korean J Radiol.* 2008;9:268–74.
5. Tung WC, Huang YJ, Leung SW, Kuo FY, Tung HD, Wang JH, et al. Incidence of needle tract seeding and responses of soft tissue metastasis by hepatocellular carcinoma postradiotherapy. *Liver Int.* 2007;27:192–200.

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## Dermoscopic characterization of longitudinal melanocytic lesions on acral skin



## Caracterización dermatoscópica de lesiones melanocíticas longitudinales sobre la piel acral

Acquired melanocytic nevi usually exhibit an oval or round shape on all body skin surfaces. Although this morphology is also the most frequent among nevi localized on the sole of the foot, we have observed a group of lesions in this location with a marked disproportion between width and length. This particular appearance has not been previously described, and it could be mistaken for malignancy. We present a series of 9 patients with elongated plantar nevi and discuss their main clinical, dermoscopic and histopathological features. Interestingly, all the lesions presented with a linear appearance, with a length greater than 7 mm. Although this measurement has been considered highly suggestive of suspicious malignant lesions in the literature, we have only found one melanoma among our cases. We would like to highlight the importance of this particular presentation of acral melanocytic nevus to avoid an incorrect diagnosis of malignancy.

We describe the clinical and dermoscopic characteristics of nine patients with a clinical diagnosis of melanocytic sole nevi who presented between 2007 and 2013 at the Pigmented Lesion Unit of the Dermatology Department of the General Hospital of Alicante (Fig. 1). The dermoscopic evaluation was performed by DermLite Foto™ (3Gen, LLC,

Dana Point, CA, U.S.A.) mounted on a digital camera (Canon G9 and G12™) and with a digital videodermoscope (MoleMax II™). Melanocytic lesions with suspicious clinical or dermoscopic features were excised and histopathologically evaluated and cases without evidence of malignancy underwent videodermoscopic follow-up. Characteristics of the cases are summarized in Table 1.

The cases included 4 men and 5 women, ranging in age from 10 to 49 years old (median age 21) and all were Caucasian. The median length nevus was 17 mm, while the median width was 3.1 mm. Dermoscopy showed a combination of various types of acral benign dermoscopic patterns (parallel furrow and typical fibrillar patterns) in 8 out of the 9 nevi (Table 1). These melanocytic nevi without dermoscopic signs of malignancy were all closely monitored (every 6 months) by videodermoscopy without evidence of neoplastic transformation. Melanoma *in situ* was detected in one out of ten patients, whose lesion had shown an atypical dermoscopic parallel ridge pattern (Fig. 2). An analysis of the recorded images permitted us to observe a particular disproportion between length and width in these plantar skin nevi. Despite their large size (diameter > 7 mm is considered a dermoscopic criterion of suspicion of malignancy) and asymmetry, we have observed that most nevi with this morphology are benign lesions.

The clinical morphology and histology of melanocytic nevi are conditioned by the anatomical location of the lesions. The pressure supported by plantar skin determines the expression of particular clinical, dermoscopic and histological features, making the diagnosis of plantar melanocytic lesions sometimes difficult in these areas.<sup>1</sup> In