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## Cutaneous Metastasis of Hepatocellular Carcinoma Following Skin Injury after Transcatheter Arterial Chemoembolization

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Dear Editor:

Transcatheter arterial chemoembolization (TACE) is widely used as an approach for patients with hepatocellular carcinoma (HCC). Cutaneous complications related to TACE such as erythema, necrosis, and scarring may rarely occur<sup>1</sup>. This report describes the first known case of cutaneous metastasis of HCC following skin injury after TACE.

A 39-year old man had been diagnosed with HCC in January 2010. On the initial computed tomography (CT) image, a 7.8 cm sized tumor was noted. The patient was treated with TACE from February 2010 via the femoral artery. On a follow-up CT in May 2010, the tumor size decreased, however, daughter nodules were noted. The 7<sup>th</sup> TACE was performed via the internal mammary artery (IMA) due to the presence of collateral pathways. In November 2010, an 8th course of TACE of the IMA was

performed. However, an erythematous to violaceous patch developed shortly after the infusion of chemotherapeutic agents and resulted in pigmentation and induration. In January 2011, the patient was referred to the dermatology clinic with two erythematous papules on the right chest that developed at the end of December 2010 (Fig. 1). The papules had developed within the pigmented induration, which was associated with skin injury after the TACE in November 2010.

Histopathologic examination of the erythematous papule showed asymmetrical, lobulated nests invading the dermis (Fig. 2A). The large cells had a polyhedral shape, eosinophilic cytoplasm, large central nuclei and prominent nucleoli (Fig. 2B). The specimen was negative for AFP (Fig. 2C). CD31 stain did not show evidence of hematogenous spread of tumor nests (Fig. 2D).

As the papules occurred on the scar and a series of

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Letter to the Editor

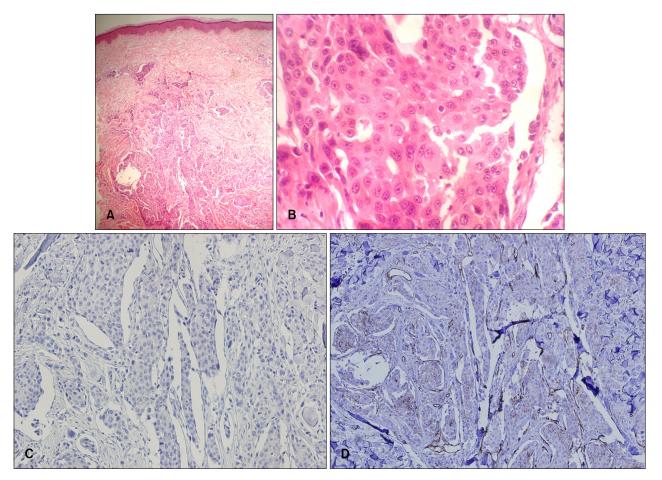
examinations showed no other metastasis, the lesions were thought to be associated with the skin injury after TACE. The biopsy specimen was negative for AFP. However, positive staining for AFP has been reported to be present in 2 to 61% of HCC<sup>2</sup>. Expression of AFP can be weak, especially in small biopsies.

Tumor seeding of HCC after interventional procedures is a rare complication. Cutaneous tumor seeding of HCC along the tract of the needle used in the diagnosis has been reported<sup>3</sup>. The frequency of needle tract implantation after radiofrequency ablation ranges from 0 to 4.4%.3 latrogenic cutaneous tumor seeding by ultrasound-guided percutaneous ethanol injection has also been rarely reported<sup>4</sup>.

TACE via the IMA may be performed when collateral pathways are evident. Repetitive TACEs or large tumor sizes may be associated with the presence of collateral pathways. In our case, TACE-induced injury may have caused inflammatory changes or adhesion of the chest



Fig. 1. Two, asymptomatic, erythematous papules and underlying pigmentation and wood plate-like induration on the right chest.



**Fig. 2.** (A) Asymmetrical, lobulated cords and nests invading the dermis (H&E,  $\times$ 40). (B) The large epithelial cells of polyhedral shape showed granular, eosinophilic cytoplasm, large, vesicular, central nuclei and prominent nucleoli (H&E,  $\times$ 400). (C) The specimen was negative for  $\alpha$ -fetoprotein (AFP) (AFP,  $\times$ 200). (D) CD31 stain did not show any evidence of hematogenous spread (CD31,  $\times$ 200).

wall that helped the progression of the residual viable tumor along the liver surface to the skin. Adhesion between the HCC and other tissues including vessels such as the peritoneum and/or omentum after TACE has been shown in a laparoscopic study<sup>5</sup>.

We have presented a case of cutaneous metastasis from HCC following skin injury after TACE that was thought to be relevant to the cutaneous complication of the chemoembolization procedure. The potential cutaneous complications of TACE must be taken into consideration.

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## Rare Manifestation of Giant Molluscum Contagiosum on the Scalp in Old Age

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## Dear Editor:

A 64-year-old man presented to our department of hospital with a one-month history of skin lesion on the scalp. Physical examination revealed a skin-colored nodule on the left temporal scalp (Fig. 1A) and a skin-colored verrucous surfaced plaque on the right temporal area (Fig. 1B). The lesions gradually increased in size. The patient had no previous history of skin disease or recurrent infection. Further history-taking and clinical examination did not reveal any risk factors or evidence of an immunocompromised state.

Histopathological examination of a punch biopsy specimen from the center of the lesions showed the classic pattern of molluscum contagiosum: subcorneal cysts and intracytoplasmic inclusion bodies, the so-called molluscum bodies, connected with the epidermal surface (Fig. 2). Based on the clinical features and histopathological findings, we diagnosed molluscum contagiosum. After diagnosis, the molluscum were removed by curettage, and no recurrence had been observed at one-year follow-up.

Molluscum contagiosum is a benign, infectious disease of the skin that presents as pearly dome-shaped papules with a central dell or depression. Although worldwide in its distribution, molluscum contagiosum has been most frequently encountered as an easily treated disease of childhood and has rarely been a cause of serious morbidity<sup>1</sup>. It occurs most commonly in children and adolescents, and is usually localized on the face, arms, legs and anogenital regions.

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