

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 study⁵.

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.

REFERENCES

1. Arora R, Soulen MC, Haskal ZJ. Cutaneous complications of hepatic chemoembolization via extrahepatic collaterals. *J Vasc Interv Radiol* 1999;10:1351-1356.
2. Minervini MI, Demetris AJ, Lee RG, Carr BI, Madariaga J, Nalesnik MA. Utilization of hepatocyte-specific antibody in the immunocytochemical evaluation of liver tumors. *Mod Pathol* 1997;10:686-692.
3. Onodera H, Oikawa M, Abe M, Chida N, Kimura S, Satake K, et al. Cutaneous seeding of hepatocellular carcinoma after fine-needle aspiration biopsy. *J Ultrasound Med* 1987;6:273-275.
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;9:268-274.
5. Seki S, Sakaguchi H, Hagihara A, Fujii H, Kobayashi S, Iwai S, et al. Transcatheter arterial chemoembolization for superficial hepatocellular carcinoma induces adhesion. *Adv Med Sci* 2007;52:66-70.

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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 morbidity¹. It occurs most commonly in children and adolescents, and is usually localized on the face, arms, legs and anogenital regions.

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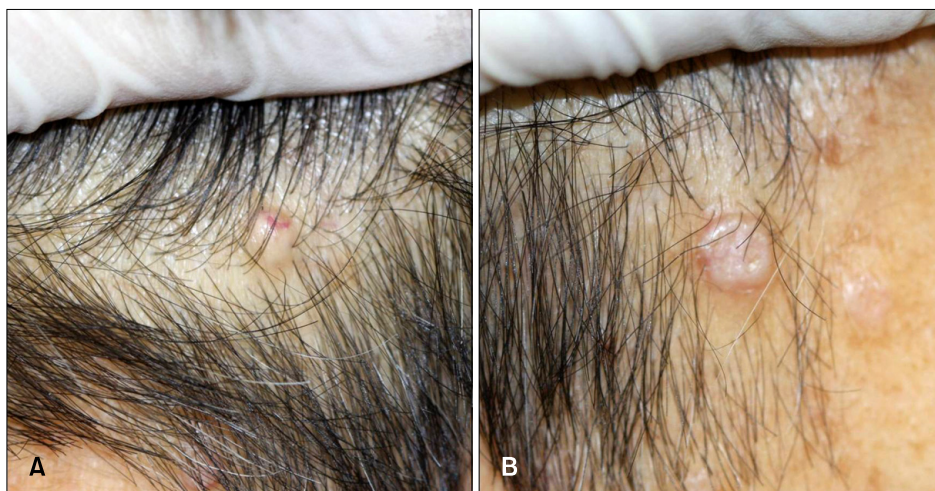


Fig. 1. Skin-colored hard papules of the (A) left, and (B) right temporal scalp. The left one measured 10×10 mm; the right, 12×12 mm.

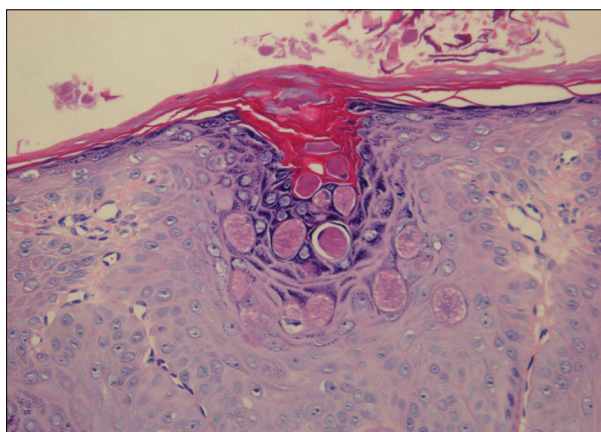


Fig. 2. Small subcorneal cyst-like structure containing white keratinous material and intracytoplasmic inclusion bodies (H&E, ×200).

Due to the characteristic appearance of the lesions, diagnosis is generally made without laboratory testing. Often specific treatments or therapies are not pursued for molluscum contagiosum infection in immune competent individuals, as lesions will resolve with time. In an immunocompetent state, a lesion may usually last two to four months, and the development of new lesions by autoinoculation is common. Most cases resolve spontaneously in six to nine months.

In conditions that involve altered immunity such as atopic dermatitis, corticosteroid and immunosuppressive therapy, sarcoidosis, leukemias, Wiskott Aldrich syndrome and acquired immune deficiency syndrome, atypical lesions of molluscum contagiosum may occur, often reaching a large size on an unusual site².

In a thorough review of the medical literature, we were able to find 13 case reports of giant molluscum contagiosum occurring in immunocompetent patients²⁻⁴. Most of

these patients were children without immunodeficiency. There has been only one case of molluscum contagiosum on the scalp in an immunocompetent patient, who was a newborn⁵. In this case, the skin lesions showed no spontaneous resolution and autoinoculation during eight months. Our patient was 64 years old.

With advanced age, human T cells reveal reductions in the proliferative response to activation, in diversity of the T-cell receptor antigen repertoire, and in cytolytic activity. B cells of aging individuals show reduced response to certain viral infections or vaccinations.

Thus, the atypical clinical manifestation of our patient might be attributable to a possible decline in immune function due to advanced age.

In the case reported here, the patient had no history of atopic dermatitis or other immune disorders. The predilection of the scalp area and the old age of our patient are interesting. To our knowledge, this is first case of giant molluscum contagiosum on the scalp in an older immunocompetent patient.

REFERENCES

1. Gottlieb SL, Myskowski PL. Molluscum contagiosum. *Int J Dermatol* 1994;33:453-461.
2. Vozmediano JM, Manrique A, Petraglia S, Romero MA, Nieto I. Giant molluscum contagiosum in AIDS. *Int J Dermatol* 1996;35:45-47.
3. Kang HY, Lim YS, Cho YW, Han JY. Seventeen cases of atypical molluscum contagiosa. *Korean J Dermatol* 2001;39:1080-1085.
4. Kim SK, Do JE, Kang HY, Lee ES, Kim YC. Giant molluscum contagiosum of immunocompetent children occurring on the anogenital area. *Eur J Dermatol* 2007;17:537-538.
5. Sun YW, Oh CW, Kim TH. Molluscum contagiosum of the newborn: an unusual presentation. *Ann Dermatol* 1998;10:53-55.