

fect of UV rays cannot be excluded.

As for most dermal pigmentary lesions, the Q-switched Nd:YAG laser is widely accepted treatment for the ADM. Our patient showed clinical improvement of the pigmentation after 8 sessions of Q-switched Nd:YAG laser treatment. Herein, we report a rare case of ADM on the glabella, paranasal cheeks and temples in a patient with HED.

## REFERENCES

1. Itin PH, Fistarol SK. Ectodermal dysplasias. *Am J Med Genet C Semin Med Genet* 2004;131C:45-51.
2. Koguchi-Yoshioka H, Wataya-Kaneda M, Yutani M, Murota H, Nakano H, Sawamura D, et al. Atopic diathesis in hypohidrotic/anhidrotic ectodermal dysplasia. *Acta Derm Venereol* 2015;95:476-479.
3. Harrison-Balestra C, Gugic D, Vincek V. Clinically distinct form of acquired dermal melanocytosis with review of published work. *J Dermatol* 2007;34:178-182.
4. Hori Y, Takayama O. Circumscribed dermal melanoses. Classification and histologic features. *Dermatol Clin* 1988; 6:315-326.
5. Fauconneau A, Beylot-Barry M, Vergier B, Robert-Barraud C, Doutre MS. Acquired dermal melanocytosis of the back in a Caucasian woman. *Am J Dermatopathol* 2012;34:562-563.

<https://doi.org/10.5021/ad.2016.28.6.787>



# Pseudoaneurysm as a Post-Biopsy Complication

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Dear Editor:

Dermatologists may encounter unexpected complications after skin biopsy. Cook and Perone<sup>1</sup> prospectively examined dermatologic surgical complications in the office setting, and overall complication rate of 1.64% in 1,343 cases were found, most of which was minor difficulties with hemostasis. Vascular complications rarely occur in dermatologic outpatient based procedures. It is thought to be especially rare after punch biopsies with relatively small and superficial incision. Complications of this category include

post-biopsy bleeding, slowly developing chronic expanding hematoma<sup>2</sup> and rarely pseudoaneurysm<sup>3</sup>. Here, we report a case of pseudoaneurysm after punch biopsy which

Received September 7, 2015, Revised October 29, 2015, Accepted for publication November 13, 2015

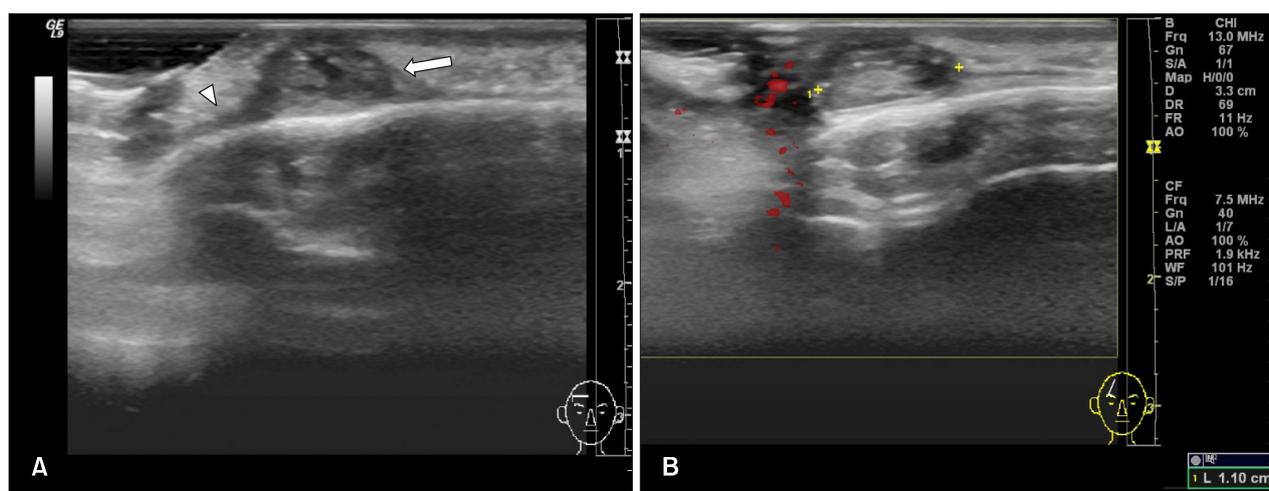
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**Fig. 1.** A 1 × 1.1-cm-sized pulsating mass with intermittent pain.



**Fig. 2.** Mixed echoic subcutaneous lumen (arrow) with fistula (arrowhead) shown on left side. (A) Transverse view, (B) longitudinal view.

spontaneously subsided.

A 62-year-old man visited us with complaint for a 1 × 1.1-cm-sized pulsating mass on the right temporal area (Fig. 1). He had taken 4 mm punch biopsy on same area under the suspicion of verruca vulgaris 2 weeks ago. In past medical history, he was being treated for the right cerebral infarction and was on warfarin 5 mg and acetylsalicylic acid 100 mg daily at the time of biopsy. Hematoma was clinically suspected and we decided to closely follow-up the patient. However, the lesion did not decrease in size after 3 months of follow-up visit, and we performed ultrasonography on the protruded site. The ultrasonography revealed mixed-echoic subcutaneous lumen and connected fistula without increased blood flow (Fig. 2). Pseudoaneurysm which occurred on the superficial temporal artery branch was clinically suspected and we planned to incise and ligate the artery. However, the patient refused the procedure and wanted to observe the lesion for the time being. It became pulseless and gradually began to flatten after 5 months. The lesion had spontaneously subsided and no further recurrence was seen to this day.

Pseudoaneurysm is a well-known sequela of trauma and iatrogenic injury of the superficial temporal artery and consists of an organized hematoma that communicates with the injured artery via a sinus tract. It develops when trauma disrupts the arterial wall and blood pressure from the artery exceeds the capacity of the coagulation cascade. The hematoma may canalize and remain in persistent communication with the lumen of the artery. Most reported cases on the face occurred on the superficial temporal artery and its branches owing to its superficial course above the skull surface<sup>4</sup>. Suture ligation of the implicated artery is traditionally considered the treatment of choice<sup>5</sup>.

Here, we report a unique case of pseudoaneurysm occurred after punch biopsy on the right temporal area with spontaneous remission. Dermatologist should keep in mind that this rare complication can be encountered even after small trauma such as punch biopsy. Especially, in case of performing biopsies in the temporal area, dermatologists should keep the predictable course of the superficial temporal artery in mind. Moreover, if such complication occurs, the possibility of spontaneous remission, as in our case, can be considered before initiating surgical treatment.

## REFERENCES

1. Cook JL, Perone JB. A prospective evaluation of the incidence of complications associated with Mohs micrographic surgery. *Arch Dermatol* 2003;139:143-152.
2. Ito T, Nakahara T, Takeuchi S, Uchi H, Takahara M, Moroi Y, et al. Four cases of successfully treated chronic expanding soft tissue hematoma. *Ann Dermatol* 2014;26:107-110.
3. Bordeaux JS, Martires KJ, Goldberg D, Pattee SF, Fu P, Maloney ME. Prospective evaluation of dermatologic surgery complications including patients on multiple antiplatelet and anticoagulant medications. *J Am Acad Dermatol* 2011;65:576-583.
4. Rubio-Palau J, Ferrer-Fuertes A, García-Díez E, García-Linares J, Martí-Pagès C, Sieira-Gil R. Traumatic pseudoaneurysm of the superficial temporal artery: case report and review of the literature. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2014;117:e112-e114.
5. Dunbar SW, Hurst EA. Pseudoaneurysm formation and repair after Mohs micrographic surgery: a report of 3 cases. *JAMA Dermatol* 2014;150:546-549.