

Linearly Curved, Blackish Macule on the Wrist

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A 66-year-old woman presented with a slowly enlarging, 4×4-mm, linearly curved, blackish macule on the left wrist of 1 year's duration. Dermoscopy revealed multiple blue-gray globules and a streak resembling ginseng. The patient underwent an arteriovenous fistula operation 9 years prior and a renal transplant 18 months prior. She had a surgical scar adjacent to the lesion and a history of hypertension and hypothyroidism. A 3-mm punch biopsy specimen was obtained.

What's the diagnosis?

- a. dysplastic nevus
- b. foreign body granuloma
- c. linear basal cell carcinoma
- d. nevocellular nevus
- e. venous lake

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The authors report no conflict of interest.

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Linear Basal Cell Carcinoma

On examination, the lesion was suspected to be a nevocellular nevus, foreign body granuloma, or venous lake; however, a skin biopsy specimen from the lesion on the left wrist revealed a tumor mass of basaloid cells, peripheral palisading arrangement, and scattered pigment granules (Figure 1). Tumor cells were negative for S-100 protein staining. These findings were consistent with a diagnosis of linear basal cell carcinoma (BCC). The lesion was removed by simple excision with primary closure of the wound. The surgical margins were free of tumor cells. The lesion had not recurred at

6-month follow-up. The patient was subsequently lost to follow-up.

Basal cell carcinoma presents with diverse clinical features, and several morphologic and histologic variants have been reported.¹ Linear BCC was described as a distinct clinical entity in 1985 by Lewis² in a 73-year-old man with a 20-mm linear pigmented lesion on the left cheek. Linear BCC often is not recognized or categorized as such by clinicians, as some may think that linear BCC is not a distinct entity but rather is one of the diverse clinical features of BCC.³ Linear BCC is believed to have specific clinical and histologic features and can be regarded as a distinct entity.⁴ Mavrikakis et al⁵ objectively defined linear BCC as a lesion that appeared to extend preferentially in one direction, resulting in a lesion with relatively straight borders and a length much greater than the width (3:1 ratio). Our patient presented with a linearly curved lesion, which is a rare feature of BCC.

Linear BCC occurs in equal proportions in men and women aged 40 to 87 years. More than 92% of reported patients were older than 60 years.⁶ The most common site for linear BCC is the

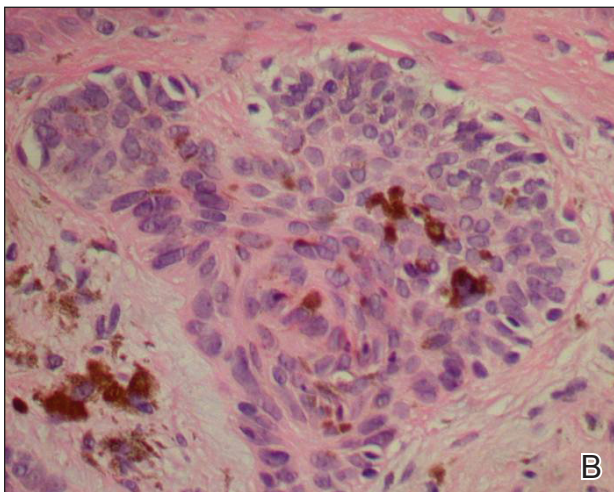
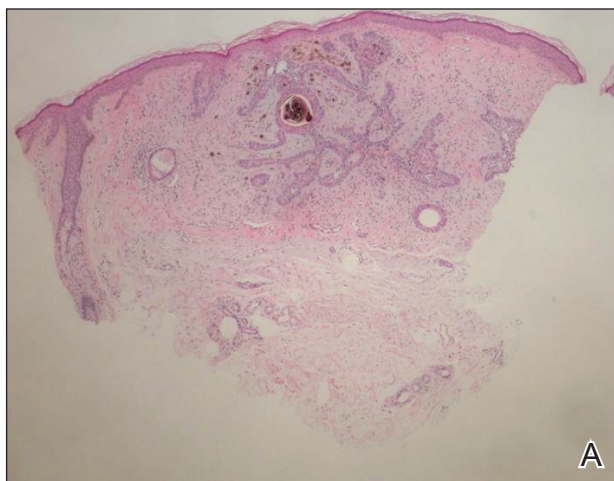


Figure 1. The biopsy specimen revealed a tumor mass composed of basaloid cells, peripheral palisading arrangement, and scattered pigment granules (A and B) (H&E, original magnifications $\times 10$ and $\times 400$).



Figure 2. Multiple blue-gray globules and a streak that resembles ginseng on dermoscopy (original magnification $\times 10$).

periocular area, with the majority of lesions occurring on the cheek or lower eyelid. The second most common site is the neck, followed by the trunk, lower face, and inguinal skin fold.^{3,5}

The mechanism of linearity has been speculated. The majority of the reported cases of linear BCC have no history of trauma.⁷ However, focal trauma has been assumed to be a risk factor for the development of linear BCC, so the possibility that the Köbner phenomenon may be related to its linear pattern has been proposed.⁸ The Köbner phenomenon can be implicated in our case, as there was a history of surgery, which resulted in a scar.

Menzies⁹ described dermoscopic features of pigmented BCC and stated that the diagnosis of pigmented BCC required the presence of 1 or more of the following 6 positive features: large blue-gray ovoid nests; multiple blue-gray globules; maple leaf–like areas; spoke wheel areas; ulceration; and arborizing treelike vessels. In our case, there were multiple blue-gray globules and a streak that resembled ginseng (Figure 2).

Linear BCC is an uncommon morphological variant that requires clinical recognition. Our case was unique because of the ginsenglike streak on dermoscopy and possible association with a prior trauma.

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