

## Creeping Hair in the Beard Area

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Dear Editor:

Creeping disease is a skin disease caused by a parasite that tunnels its way through the skin, leaving a visible red, itchy, linear eruption. The most representative example of creeping disease is cutaneous larva migrans. In rare cases, a creeping hair in the skin may mimic creeping disease.

A 31-year-old Korean man presented with a single linear, thin, and wavy black line embedded within the superficial skin on the right submandibular region (Fig. 1, black arrows). The skin lesion was detected incidentally 1 month previously. The black line, 7 cm long when stretched, extended horizontally and laterally along Langer's line. The wavy black line was easily moved and stretched by pressure, and restored quickly. The lateral tip was exposed out of the skin when pushed laterally. The black line was easily and completely removed by pulling its exposed tip with a steady pressure by using forceps (Fig. 2A). Interestingly, a light and scanning electron microscopic examination confirmed the black line to be hair (Fig. 2B). Creeping hair, also known as migrating hair, embedded hair, pili cuniculati (burrowing hair), or cutaneous pili migrans, was diagnosed.

Creeping hair is often initially misdiagnosed as cutaneous parasitic infections such as cutaneous larva migrans. Some characteristics that can differentiate between creeping hair and cutaneous larva migrans, to achieve an accurate diag-

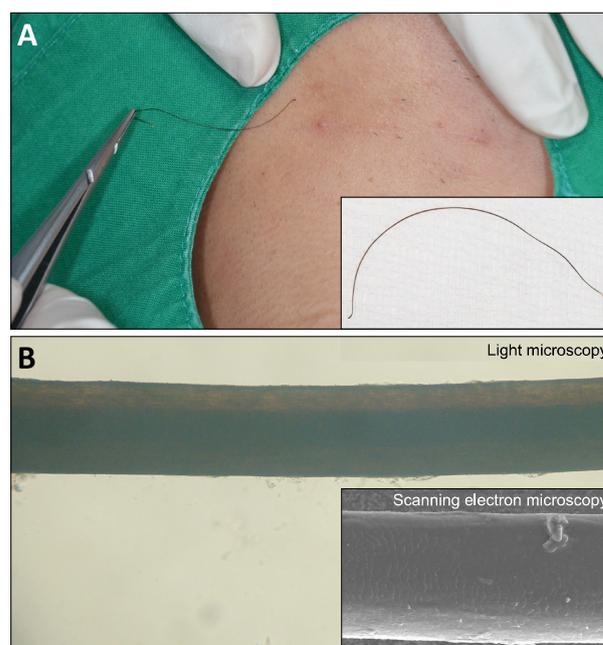
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**Fig. 1.** A single linear, thin, and wavy black line was embedded within the superficial skin on the right chin (black arrows). It showed lateral extension along the direction of Langer's line and the same growing direction with surrounding beard (inset, red arrows).



**Fig. 2.** (A) The creeping hair was easily and completely removed. (B) Hair shaft viewed under a light microscope ( $\times 400$ ) and a scanning electron microscope (inset:  $\times 2,000$ ).

nosis, are as follows<sup>1</sup>. First, although there is no pruritus in patients with creeping hair, patients with cutaneous larva migrans have intense itch symptoms and secondary dermatitis. Second, in creeping hair, the penetrating hair can move in only one direction. However, cutaneous larva migrans can move in any direction and generally leaves more tortuous tracts. Third, creeping hair is easily and completely removed by slight pulling at the other side of the hair root. Fourth, the growth direction of creeping hair is identical to that of the normal surrounding hairs (Fig. 1, red arrows). Finally, once removed, it can be easily confirmed to be hair by using light microscopy.

In this case, the creeping hair was not considered to have an external source, but was believed to have grown inside the skin, burrowing in the uppermost dermis<sup>2</sup>. This "ingrowing beard" may be associated with minor trauma due to shaving with a safety razor and a lateral oblique beard growth on the lateral chin (Fig. 1, red arrows). However, some reported cases showed eruptions on the plantar region due to the penetration of a hair fragment from the outside, which could be termed "hair as a foreign body"<sup>2,3</sup>. Previous reports of creeping hair, including the present case, involve penetration by thick, dark hair, and the individuals are most likely of Asian origin<sup>4</sup>. This may be associated with the fact that among all ethnic groups, hair in Asians has the largest cross-sectional area with the highest tensile strength<sup>5</sup>. Cases of creeping hair are extremely rare, and we believe that this is the first Korean case.

In conclusion, dermatologists should always consider the possibility of creeping hair, although rare, in patients showing creeping eruptions.

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