Pedunculated clear cell acanthoma.
Report of a case with dermoscopic observation

Clear cell acanthoma is a distinct clinical and histological entity that was first described in 1962 by Degos et al. The clinical appearance is usually characterized by a nodule or plaque with thin scaly-crusts on the legs, although considerable variety exists. Silhouette of pedunculation is rare. Histologically, it has distinct features, with well-demarcated acanthosis consisting of clear cells. On the other hand, some authors reported dermoscopic findings consisting of dotted vessels or capillaries in reticular or net like patterns [1-5]. We describe a pedunculated clear cell acanthoma, and compare its dermoscopic findings with previous reports.

An 85-year-old Japanese female presented a skin lesion on a traumatic scar on her right lower leg. A small nodule had appeared about 10 years previously, and had gradually enlarged and elevated, asymptptomatically. Physical examination revealed a red, elastic-soft, pedunculated round nodule, measuring 15 × 15 × 6 mm, on the anterior surface of her lower leg. The surface of the nodule was covered by waxy keratinous materials (figure 1A). No regional lymph node was palpable. Utilizing a dermoscope, bunch-like, partly linear vessels on a pinkish-blotched background were observed translucently through the surface hyperkeratotic scales (figure 1B). Complete removal revealed that the present case consisted of irregular and partly pseudocarcinomatous acanthosis and edematous stroma forming a symmetrical pedunculated silhouette (figure 1C). The acanthosis was composed of clear cells, which had strikingly bright cytoplasm and normal nuclei. The rete ridges were elongated, and their margin consisted of normal basal keratinocytes.

Figure 1. A) A red, elastic-soft, pedunculated round nodule, measuring 15 × 15 × 6 mm, was observed on the anterior surface of the lower leg. The surface of the nodule was covered by waxy keratinous materials. B) Utilizing a dermoscope, bunch-like, partly linear vessels on a pinkish-blotched background were observed. C) The pedunculated nodule consisted of irregular, partly pseudocarcinomatous acanthosis and edematous stroma. D) The acanthosis was composed of clear cells, which had strikingly bright cytoplasms and normal nuclei. The rete ridges were elongated, and their margin consisted of normal basal keratinocytes.


Department of Dermatology, Teikyo University School of Medicine, 11-1, Kaga, 2-chome, Itabashi-ku, Tokyo 173-8605, Japan <takamitsu211@yahoo.co.jp>

Takamitsu TANAKA
Takako ARAI
Takeko ISHIKAWA
Takamitsu OHNISHI
Shinichi WATANABE

Fibroepithelioma of Pinkus: poor response to topical photodynamic therapy

Fibroepithelioma of Pinkus (FEP) is an uncommon, indolent variant of basal cell carcinoma (BCC) with a distinct growth pattern. For treatment of this tumor, surgical excision has been commonly used. Herein, we attempted treatment with topical methylaminolevulinate (MAL) photodynamic therapy (PDT) for a patient with FEP; however, there was a poor response to this treatment.

A 49-year-old female presented with a 1-year history of skin lesions. Physical examination revealed a 2 cm × 1.5 cm sized brownish, erosive plaque on the right side of the abdomen (figures 1A, B). A skin biopsy specimen from the plaque showed numerous, elongated, anastomosing thin cords of basaloid cells arising from the epidermis. They were embedded in a loose, fibrotic stroma, with some pigmentation and the overall features were consistent with FEP (figure 1C). We explained the treatment options, including surgery and PDT, to the patient. Because she was afraid of surgical procedures and post-surgical scars, we treated the lesion monthly with topical MAL-PDT. The lesion was illuminated with red light from a Waldman PDT 1200 lamp at a light dose of 100 J/cm² and a fluence rate of 100 mW/cm². After five sessions of PDT, the tumor showed regression; however, some residual lesion was noted in the skin biopsy. After four more sessions of treatment, the tumor still remained histologically identifiable (figure 1D). Therefore, PDT was discontinued, and a wide surgical excision of the lesion was performed. The patient has been followed for recurrence of disease.

In 1953, FEP was first described by Herman Pinkus, who characterized it as a premalignant fibroepithelial tumor of the skin [1]. Traditionally, FEP is regarded as an unusual variant of BCC. Even though FEP is considered an indolent tumor with a low risk of metastasis, as a variant of BCC, adequate and complete treatment is necessary. Until now, surgical excision has been the most common treatment for FEP. Recently, for the treatment of BCC, there has been an increased use of topical PDT. The use of MAL-PDT has achieved a complete response rate of 85–93% for superficial BCC and 75–82% for nodular BCC at 3 months after the treatments [2].

Therefore, we tried MAL-PDT for FEP in the present case; however, nine sessions of treatment demonstrated an incomplete response. The possible reasons for this finding include the following: first, the unique character of the FEP, which is different from classic BCC. Recently, in contrast to the traditional view, FEP has been suggested to be a benign follicular tumor similar to a trichoblastoma [3, 4]. After the application of photosensitizers, neoplastic tissues exhibit a greater preferential production of photodynamic porphyrins compared to non-neoplastic cells. Therefore, the benign nature of FEP might be associated with the reduced effectiveness of PDT; second, the character of the stroma of FEP might be associated with the results. It has been shown that morphic BCC is less responsive to topical PDT than other types of BCC. The abundant fibrous stroma of the tumor has been suggested to interfere with the effects [5]. Even though the amount of fibromyxoid stroma in FEP is less than that of a morphic BCC, a similar mechanism might be involved in the reduced response of PDT; third, the pigmentation of the tumor could affect the results. It is known that PDT is less effective for pigmented BCCs because the melanin absorbs the photoactivating light required for protoporphyrin IX. Although the pigmentation was very mild in the present case, we can not exclude this possibility of interference [6].

In summary, we report a case of FEP which showed an unsatisfactory response to topical PDT. We suggest that complete surgical excision should be considered as the first line treatment for FEP.


Min Young PARK
You Chan KIM

Department of Dermatology, Ajou University School of Medicine, 5 Wonchon-Dong, Yeongtong-Gu, Suwon 443-721, South Korea
<maychan@ajou.ac.kr>