

Dermoscopy of Pilonidal Cyst Disease: A Case-series

Dear Editor,

Pilonidal cyst disease is a common, acquired, inflammatory disease predominantly affecting the natal clefts of the buttocks (1,2). The disease has a predilection for men, with a male-to-female ratio of 3-4:1. Patients are generally young, towards the end of second decade of life. Lesions are initially asymptomatic, while the development of complications such as abscess formation is associated with pain and discharge (1). Patients with pilonidal cyst disease may present to dermatology outpatient clinics, especially when the disease is asymptomatic. Herein we report the dermoscopic features of four cases of pilonidal cyst disease encountered in our dermatology outpatient clinic.

Four patients who presented to our dermatology outpatient department for evaluation of a solitary lesion on buttocks were diagnosed with pilonidal cyst disease based on clinical and histopathological examination. All patients were young men and presented with solitary, firm, pink, nodular lesions in the region in proximity to the gluteal cleft (Figure 1, a, c, e). Dermoscopy of the first patient revealed a red structureless area in the central part of the lesion, consistent with ulceration. Additionally, white lines reticular as well as glomerular vessels were present at the periphery on the pink homogenous background (Figure 1, b). In the second patient, a yellow structureless central ulcerated area was surrounded by linearly arranged multiple dotted vessels at the periphery on a homogenous pink background (Figure 1, d). In the third patient, dermoscopy revealed a central yellowish structureless area with peripherally arranged hairpin and glomerular vessels (Figure 1, f). Lastly, similar to the third case, dermoscopic examination of the fourth patient showed a pink homogenous background with yellow and white structureless areas and peripherally arranged hairpin and glomerular vessels (Figure 2). Demographics and clinical features of the four patients are summarized in Table 1. Histopathology of all our cases revealed epidermal invagination and sinus formation, free hair shafts, and chronic in-

flammation with multinuclear giant cells. Histopathological slides of the first case can be seen in Figure 3 (a-b). All patients were referred to general surgery for treatment.

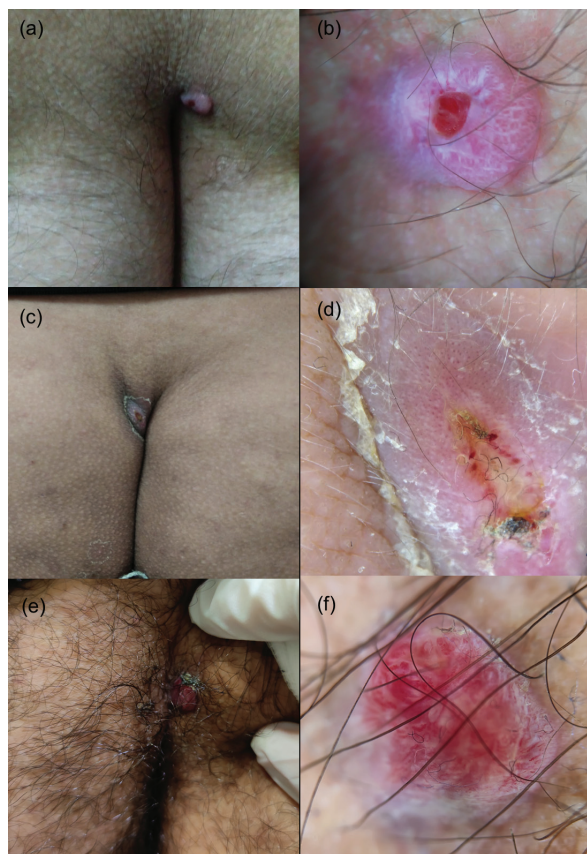


Figure 1. (a) Clinical photograph of the first patient. (b) Dermoscopic photograph of the first patient. DermLite DL4 dermatoscope with $\times 10$ magnification (3Gen LLC, Dana Point, CA, USA) (polarizing mode). (c) Clinical photograph of the second patient. (d) Dermoscopic photograph of the second patient. DermLite DL4 dermatoscope with $\times 10$ magnification (3Gen LLC, Dana Point, CA, USA) (polarizing mode). (e) Clinical photograph of the third patient. (f) Dermoscopic photograph of the third patient. DermLite DL4 dermatoscope with $\times 10$ magnification (3Gen LLC, Dana Point, CA, USA).

Table 1. Demographics and clinical features of the patients

Patient	Age/Sex	Clinical features	Dermoscopy
1	16/male	Solitary, firm, pink nodule with central erosion on the right natal cleft	Peripheral glomerular vessels, white lines; central erosion
2	20/male	Centrally ulcerated, solitary, firm nodular lesion with peripheral collarette scaling on the left natal cleft	Peripheral dotted vessels; central ulceration
3	22/male	Solitary, oozing, erythematous nodule on the right natal cleft	Peripheral hairpin and glomerular vessels, yellow and white structureless areas
4	22/male	Solitary, firm, pink nodule on the left natal cleft	Peripheral hairpin vessels, yellow structureless areas

The current knowledge pertaining to dermoscopy of pilonidal cyst disease is scarce in the dermatologic literature, and was previously evaluated in only two

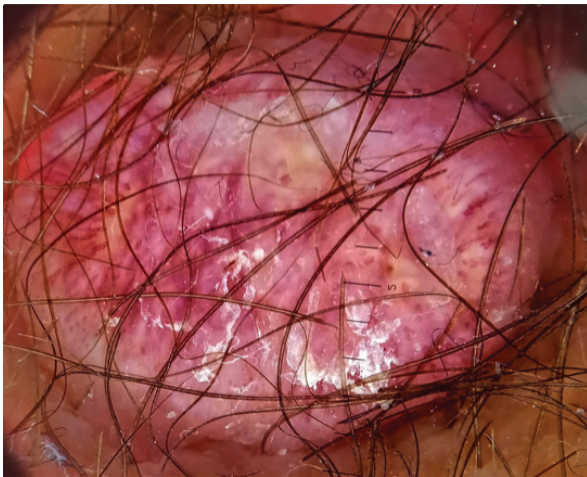


Figure 2. Dermoscopic photograph of the fourth patient. Heine Delta 20T dermatoscope with $\times 10$ magnification (Heine Optotechnik, Herrsching, Germany) (polarizing mode).

cases. Similar to our cases, the authors reported the presence of a pink-colored background, radial white lines, central ulceration, and multiple peripherally arranged dotted vessels (3). The dermoscopic features of pilonidal cysts differ from other epithelial cysts and sinuses. As for epidermal cysts, the presence of punctum and an ivory-white background color have been reported as characteristic dermoscopic findings (4,5). In addition, unruptured epidermal cysts reveal arborizing telangiectasia, while the ruptured epidermal cysts show peripheral linear branched vessels (4,5). A peripheral brown rim, linear vessels, and yellow homogenous background of the entire lesion have been reported as dermoscopic features of steatocystoma multiplex as well as milias (5). Of note, other cystic lesions mentioned above are typified by linear vessels, whereas pilonidal cysts present dotted, glomerular, and hairpin vessels.

Pilonidal cyst disease must also be considered in the differential diagnosis of pink nodular lesions, along with amelanotic melanoma, basal cell carcinoma, squamous cell carcinoma, pyogenic granuloma,

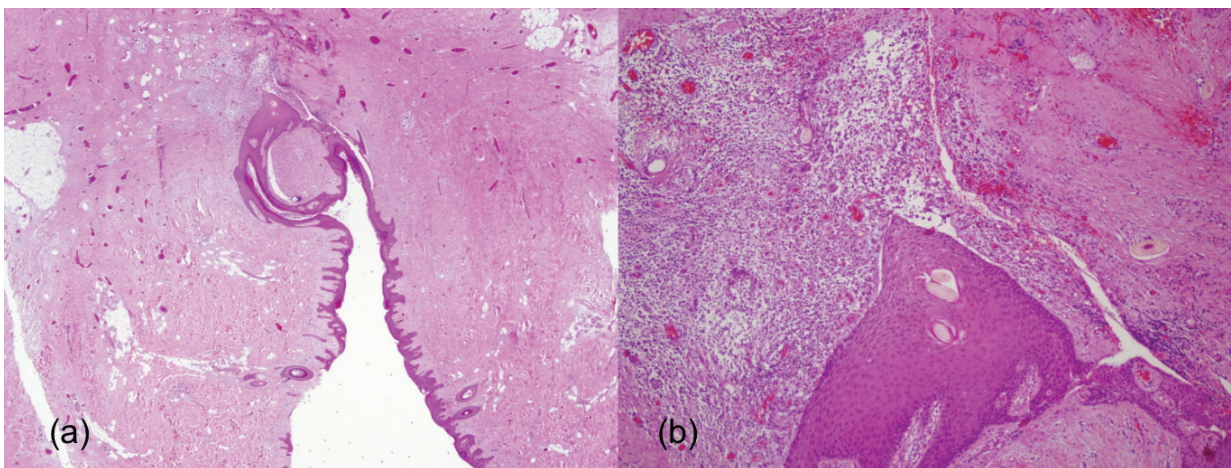


Figure 3. (a) Epidermal invagination and sinus formation (hematoxylin and eosin, $\times 20$). (b) Free hair shafts and chronic inflammation with multinuclear giant cells hematoxylin and eosin, $\times 400$.

lymphoma, and pseudolymphoma (3). Based on our cases and the two cases in the literature, pink background, central ulceration, peripherally arranged dotted vessels, and white lines seem to be common dermoscopic features of pilonidal cyst disease. Our observations demonstrate that central yellowish structureless areas along with peripheral hairpin and glomerular vessels are also among the dermoscopic features of pilonidal cyst disease. In conclusion, pilonidal cysts can be easily differentiated from other skin tumors by the aforementioned dermoscopic features, and the diagnosis in patients clinically suspected of having pilonidal cyst can be supported by dermoscopy. However, there is need for further studies in order to better characterize typical dermoscopic features of this disease and their frequency.

References:

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