

## Perianal Plasma Cell Dermatitis: A Diagnostic Challenge with Unique Dermatoscopic Features

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### Introduction

Perianal plasma cell dermatitis is a rare condition characterized by inflammatory perianal lesions. Diagnosis can be challenging due to overlapping clinical features with other conditions. We present a case highlighting the diagnostic utility of dermoscopy in perianal lesions, with unique findings.

### Case Presentation

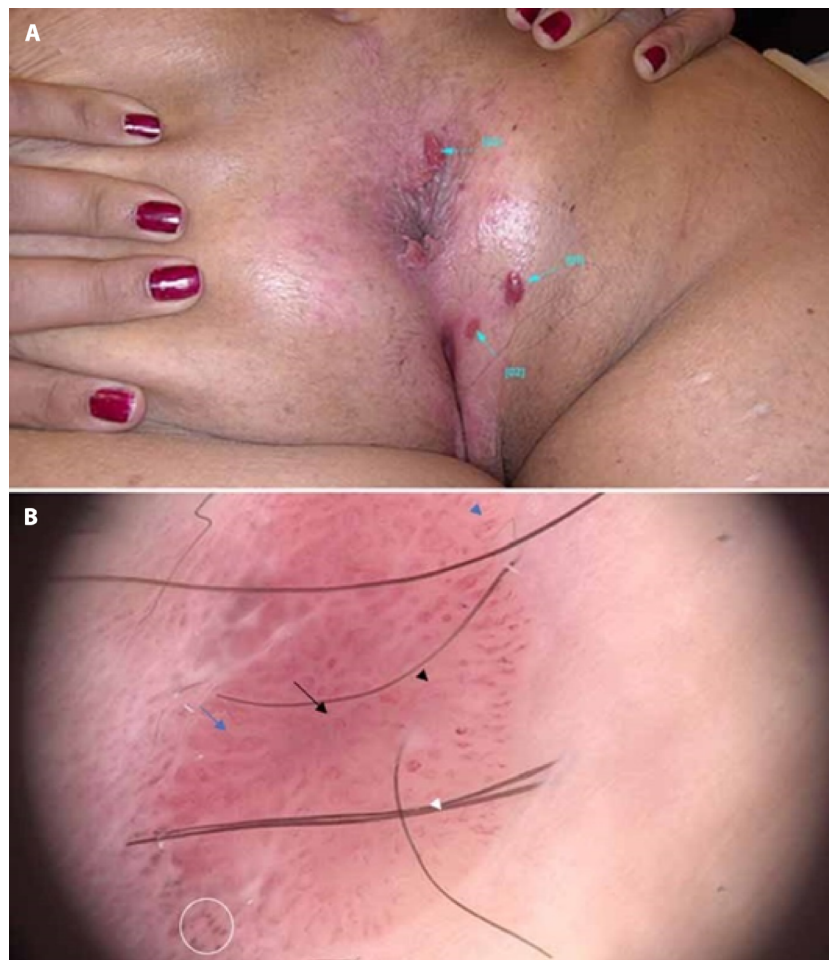
A 37-year-old woman with a history of kidney transplantation presented with perianal lesions that had been persisting for 1 month. Physical examination revealed 3 well-demarcated, erythematous, shiny, erosive plaques and a papule in the perianal region (Figure 1A). Dermoscopic examination showed pink-orange structureless areas with polymorphic vessels, including elongated coiled vessels and vessels with central dots within a circle. The vessels were

mainly arranged in lines. There were clustered gray dots/clods at the base of the lesion (Figure 1B).

The patient's syphilis serology returned negative. Histopathological analysis of a punch biopsy confirmed plasma cell mucositis (Figure 2, A and B). Treatment with fusidic acid 2% and betamethasone valerate 0.1% cream resulted in partial regression of lesions after 1 month.

### Conclusions

Plasma cell mucositis, originally described as Zoon balanitis, is a rare inflammatory condition primarily affecting mucosal surfaces [1]. While its non-mucosal counterpart has been reported in various locations, including the perianal region, its presentation and diagnosis remain challenging [2]. Our case adds to the limited literature on perianal plasma cell dermatitis, emphasizing the importance of recognizing its dermoscopic features to facilitate accurate diagnosis.

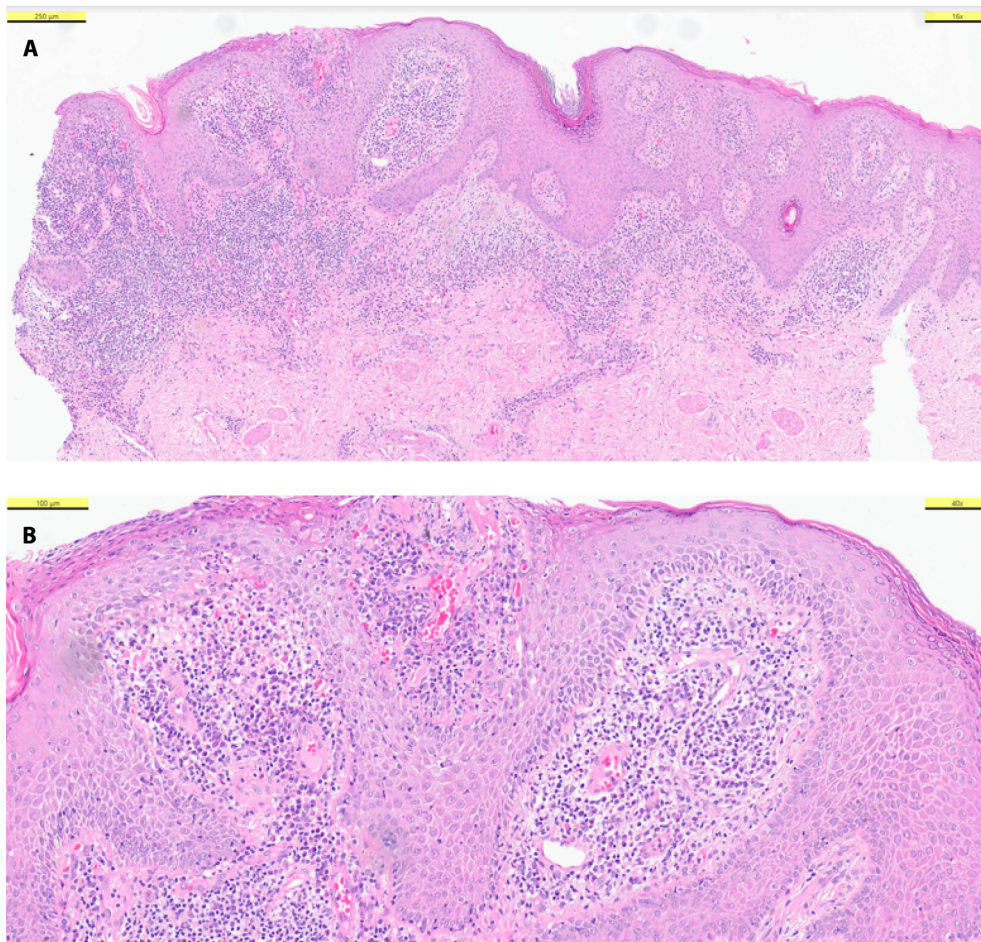


**Figure 1.** (A) Clinical image of the patient's perianal area. (B) Dermoscopic features of the lesion. Pink-orange structureless area with clustered gray dots/clods at the base of the lesion (circle) and polymorphic vessels including looped (blue arrowhead), curved (white arrowhead), elongated large coiled (blue arrow), serpentine (black arrowhead), and vessels presenting with central dot within a circle (black arrow).

Dermoscopy plays a crucial role in diagnosing perianal plaques, since the dermoscopic features of Zoon balanitis are well-established. These features include pink-orange structureless areas, linear curved vessels of serpentine, convoluted, chalice-shaped morphologies, linear vessels distributed in an irregular pattern, and dotted/glomerular vessels that are usually sparse in distribution [3]. Given the overlapping clinical features with conditions like Bowen disease, erythroplasia of Queyrat, and extramammary Paget disease, dermoscopy offers a valuable means of differentiation [4,5].

The dermoscopic examination of our case closely mirrored the characteristic features of Zoon balanitis, presenting pink-orange structureless areas accompanied by linear,

curved, and elongated coiled vessels. Notably, the elongated and enlarged coiled vessels observed resembled those typically associated with Bowen disease, adding complexity to the differential diagnosis. Additionally, the identification of vessels exhibiting a central dot within a circle represents a novel finding, suggesting potential variations in the dermoscopic presentation of plasma cell dermatitis. These observations emphasize the need for further studies to explore the diagnostic utility of dermoscopy across different anatomical locations. Ultimately, our report underscores the invaluable role of dermoscopy as a non-invasive diagnostic tool in the evaluation of perianal plaques, facilitating accurate diagnosis and appropriate management strategies.



**Figure 2.** (A) Prominent dermal inflammatory cell infiltration, underneath an acanthotic and spongiotic epidermis, displaying findings of excoriation on the surface (H&E, ×16). (B) Inflammatory cell infiltration, rich in plasma cells (×40).

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