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Erythematous Plaque in the Left Axillary Region

A diagnostic challenge where dermoscopy can help

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A 70-year-old male patient was attended in our outpatient dermatological clinic for a plaque on left axillae of unknown time of evolution. Physical examination revealed an erythematous plaque with no desquamative component (Fig. 1A). Dermoscopy showed thick reticular white lines, white clods, and structureless areas (Fig. 1B), dotted and linear vessels**,** and a sessile projection in the lower part of the plaque. Histological examination using a 4 mm punch biopsy revealed a hyperkeratotic epidermis without dyskeratosis, with intraepidermal infiltration of dysplastic cells distributed singly and in clusters (Fig.1C). Immunohistochemistry staining of this tumoral component was positive for GCDFP-15, mammaglobin and CK7, and negative for HMB45 and S-100 protein, which was consistent with the diagnosis of extramammary Paget's disease (EMPD). Complementary examinations (body-TC, a complete blood test with hemogram, liver and renal function, ions, protein S100b and PSA; colonoscopy and mammary ecography) ruled out the presence of concomitant tumour. The lesion was completely removed through wide local excision and primary closure, with no local recurrence or distant metastasis during the following 12-months. He is currently under long-term follow-up with periodic revisions every 6 months.

Comment

EMPD is an infrequent cutaneous adenocarcinoma with unknown incidence, which predominantly affects postmenopausal Caucasian women and Asian men aged between 60 and 80 years old. It is usually presented as a slow-growing rounded or oval erythematous plaque, asymptomatic or pruritic, located in genital, perianal or, less frequently, axillary regions.[1] Dermoscopy is a non-invasive technique which raises suspicion of EMPD. Pigmented, whitish and reddish structures represent the main groupof dermoscopy patterns. Glomerular and dotted vessels are the most common vascular patterns. Lava lake structures (BAW) and cloud-like structureless areas (WAW) were described by Payapvipapong *et al*.[4] None of the patients had axillary lesions, practically all of them were located in the ano-genital region. This could explain the fact that we have not observed BAW and WAW in our patient. Histology allows to distinguish between EMPD and other diagnoses such as Langerhans cell histiocytosis, Bowen's disease, amelanotic melanoma and mycosis fungoides (Table 1).[1]

The most relevant prognostic factor is the presence of underlying malignancy, either a contiguous tumour (23% of cases) or a distant one (8%-46% of cases). Underlying cancer screening might include a complete physical examination with lymph node and breast examination. Complementary tests may include urine cytology and colonoscopy for both genders, PSA blood test and digital rectal examination in male patients, and Papanicolaou test and mammography in female patients.[2]

Primary cases, as the one we present, are usually indolent, with good survival rates. Wide local excision is the gold standard treatment, although imiquimod, photodynamic therapy or radiotherapy could be considered in non-surgical cases.[1,3] Recurrence rates are considerably elevated regardless of the treatment, so a long-term follow-up based on a careful physical examination is highly recommended.[1]

The authors have obtained patient consent for publication purposes.

Authors' Contribution

All authors contributed equally in the conceptualization, design, data acquisition, analysis and write up of the manuscript.

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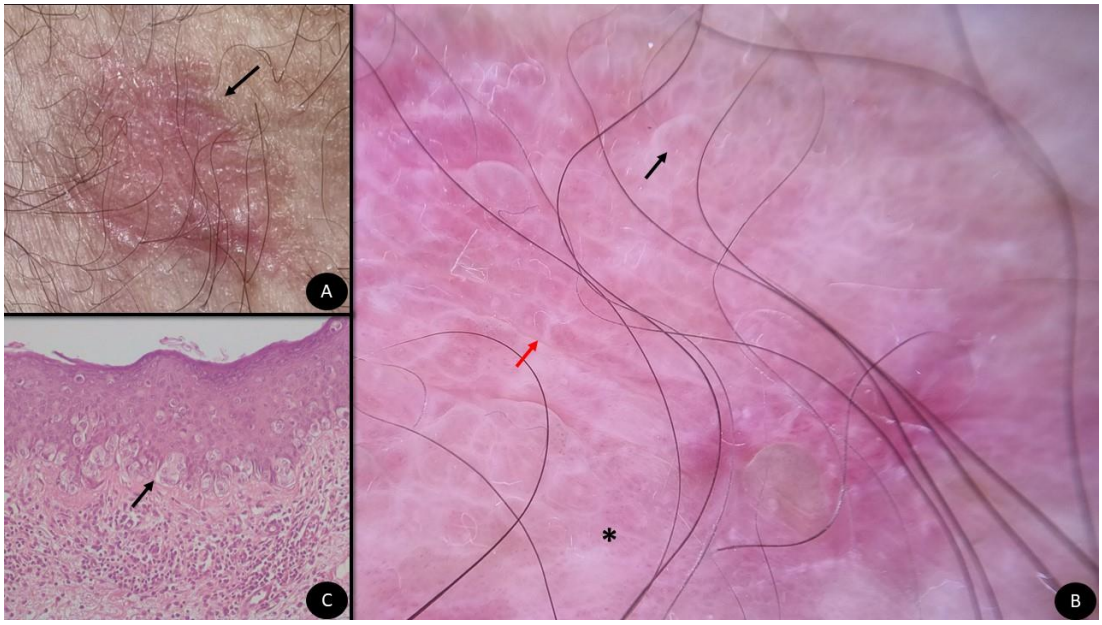

Figure 1: (A) Round erythematous plaque with slightly raised edges without scaling or ulceration, located on the left axilla (black arrow: biopsy area); **(B)** Dermoscopy showed milky red structureless areas, reticular white lines (red arrow) and white clods (black arrow). Dotted and linear vessels (asterisk) werethe vascular pattern identified; **(C)** Epidermis with hyperkeratosis without dyskeratosis, with a component of dysplastic cells distributed singly and in clustered, with the following features (black arrow): large cells with pale cytoplasm and irregular nuclei with visible nucleoli, most of them just above the epidermal basal layer, with others ascending to intermediate epidermal strata (H&E 4x).