

Extramammary Paget Disease: Report of 2 Cases Treated by Mohs Micrographic Surgery

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To the Editor:

Extramammary Paget disease (EPD), first described by Crocker¹ in 1889, is a rare intraepithelial neoplasia of regions of the skin rich in apocrine glands. The lesions present clinically as erythematous scaly or slightly pruriginous plaques, and histological studies show cells with large cytoplasm and prominent nucleoli throughout the epidermis. In immunohistochemical studies they test positive for carcinoembryonic antigen (CEA), epithelial membrane antigen (EMA), and high molecular weight cytokeratins—findings that allow differential diagnosis from Bowen disease or pagetoid melanoma. The histogenesis of EPD is the subject of debate, with suggestions that it could arise from pluripotential epidermal cells with subsequent glandular differentiation.² The lesions have traditionally been described in 3 subtypes: exclusively cutaneous; with an associated underlying adnexal carcinoma; or with a visceral neoplasia. The prognosis varies according to the subgroup.

We present 2 new cases of EPD treated by Mohs micrographic surgery (MMS).

The patients were 2 men aged 74 and 80 years old, both consulting for plaques, one in the axillary region and the other in the pubic area, present for 5 months and 2 years respectively, and refractory to treatment with topical corticosteroids (Figures 1 and 2). Clinically these were asymptomatic, noninfiltrated erythematous plaques of a pearly appearance. Full examination produced no evidence of other suspicious skin lesions or local swollen lymph nodes, and no further spread was detected. The results of skin biopsies were consistent with EPD (Figure 3) with positive immunostaining for cytokeratins 8 and 18, cell adhesion molecule 5.2, CEA, and EMA. They tested negative for S-100 and human melanoma black 45. Surgery was undertaken by deferred CMM in 2 and 3 stages, respectively (margins of 2 cm of perilesional tissue in the first stage). Both patients underwent reconstruction of the postexcisional defect with advancement plasty and direct closure in layers, and there were no signs of local recurrence 14 and 10 months later, respectively.

EPD is a rare disease where 98% of cases occur in the genital or anoperineal region,³ with the axillary region as the most common extragenital site.⁴ Association with internal neoplasia (12%-20%) is most common in perianal EPD, with rates of between 15% and 45%.

There are no clearly established guidelines for treatment (as is also the case for diagnosis and follow-up),



Figure 1. Pearly erythematous plaque on the right axilla.



Figure 2. Scaly erythematous plaque on the pubic area.

but surgical excision with wide margins or MMS are the techniques of choice when there is no association with underlying neoplasia. MMS is a treatment option for skin tumors that includes histological monitoring of the surgical margins of the tumor prior to reconstruction. There are 2 modes: conventional MMS where tissue is frozen and subjected to histological evaluation immediately following surgery, and deferred MMS, where the tissue is embedded in paraffin for later study.

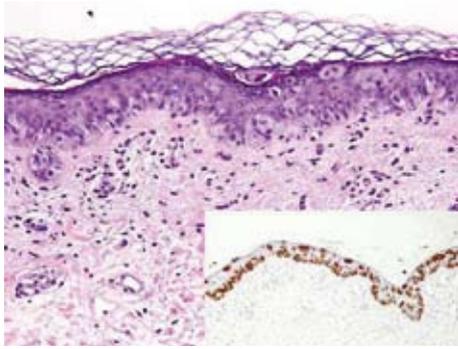


Figure 3. Hematoxylin-eosin staining $\times 200$ and immunohistochemistry with CAM 5.2 $\times 100$. Nests and cells with enlarged cytoplasm and prominent nucleoli in all epidermal layers.

The most extensive series to date was published in 2004,⁵ and involved a retrospective cohort study of 27 cases of EPD treated with MMS. The study examined 19 patients with primary EPD and 8 with recurrent EPD following initial surgery. The recurrence rate was 16% after 58 months of postoperative follow-up for primary tumors, compared with 50% after 28 months of follow-up in patients with recurrent EPD. This suggested that EPD are more aggressive, probably due to the multicentric location of these recurrent tumors.

The more extensive second series of EPD treated with MMS⁶ included 95 patients—80 treated with wide surgical excision and 15 with MMS. Statistically significant results were obtained after a period of follow-up of between 24 and 65 months, with recurrence of 22% for conventional surgery compared with 8% for MMS.

According to published data, recurrence with MMS ranges from 8% to 26%, compared with 33% to 60% for wide surgical excision (3–5 cm margins of healthy perilesional tissue). However, recurrence with MMS may be higher than 50% when dealing with a recurrent tumor.⁵

Adjuvant lymphadenectomy is not routinely recommended unless there are palpable lymph nodes⁵ as increased overall survival has not been demonstrated.

When MMS cannot be used, various other techniques have been tried in an effort to determine the tumor margins preoperatively, including multiple scouting biopsies,⁷ photodynamic mapping,⁸ and fluorescein-aided visualization.⁹ When complete excision is not possible other alternatives are described in the literature, including radio-

therapy,¹⁰ topical or oral chemotherapy, CO₂ laser therapy, or topical imiquimod.

In conclusion, despite the uncommon nature of this disease, it must be considered in all patients presenting slow-developing erythematous scaly plaques in areas rich in apocrine glands. MMS has achieved good results in the treatment of EPD with a lower rate of recurrence than wide surgical excision, and so can be considered the treatment of choice at the present time.

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Conflicts of Interest

The authors declare no conflicts of interest.

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