Multicentric pigmented Bowen's disease of the genitalia associated with carcinoma in situ of the cervix

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SUMMARY A case of multicentric pigmented Bowen's disease in a 45 year old woman with a previous history of carcinoma of the cervix is described. The two conditions may have a common pathogenesis, and a preceding viral infection with herpes simplex or human papillomavirus could be of aetiological relevance. Patients with multicentric pigmented Bowen's disease may be at risk of developing other tumours of the genital tract. Treatment with carbon dioxide laser proved effective.

Introduction

Multicentric pigmented Bowen's disease is a relatively benign form of carcinoma in situ of the genitalia, which has emerged as a distinct clinical entity since its recognition by Lloyd in 1970.1 We report on a patient in whom multicentric pigmented Bowen's disease was preceded by carcinoma in situ of the cervix, and describe successful treatment of this condition by carbon dioxide laser.

Case report

A 45 year old woman presented with a one year history of increasing black pigmentation of the anogenital region associated with pruritus (fig 1). Examination showed intense pigmentation extending from the mons pubis to the natal cleft, which was macular on the clitoris, labia, and vaginal introitus but on the posterior commissure, perianal area, and natal cleft there were multiple pigmented papules coalescing to form plaques (fig 2). Multiple biopsy specimens taken from the perineum and perianal skin all showed cellular and nuclear atypia of the epidermis consistent with multicentric pigmented Bowen's disease (fig 3).

Two years previously routine cervical cytology had disclosed severe dysplasia, and a cone biopsy of the cervix confirmed the presence of carcinoma in situ. A radical hysterectomy was performed. At that time no abnormality was noted on the anogenital skin. The patient had no history of herpes genitalis, condylomata acuminata, or any sexually transmitted disease.
Multicentric pigmented Bowen's disease is a condition that affects the genitalia and is characterized by the development of plaques or papules that may coalesce to form larger lesions. These lesions can be flat or raised and may have a hyperpigmented appearance. The disease is often associated with the presence of viral DNA, specifically human papillomavirus (HPV), and can progress to invasive squamous cell carcinoma in situ.

**Discussion**

Multicentric pigmented Bowen's disease is a rare condition that is characterized by the development of multiple plaques or papules on the genitalia. These lesions can be flat or raised and may have a hyperpigmented appearance. The disease is often associated with the presence of viral DNA, specifically human papillomavirus (HPV), and can progress to invasive squamous cell carcinoma in situ.

Initial treatment with 5-fluorouracil (Efudix) 2% in fatty acid propylene glycol base (Metosyn diluent) produced some resolution of the papules but resulted in skin irritation. This was therefore discontinued, and carbon dioxide laser vaporisation was started on the perianal area. She received four treatments at intervals of three to six months over a total period of 14 months. The affected skin was treated to a depth of 3-4 mm. This produced only slight discomfort and resulted in clearing of the lesions with minimal scarring, and there has been no evidence of recurrence in the treated areas to date.

The pathogenesis of multicentric pigmented Bowen's disease is unknown but may be related to HPV infection. HPV has been detected in the lesions, and its role in the development of the disease is being investigated. The clinical presentation of the disease may vary, and there is no single treatment that is effective for all cases. Treatment options include cryotherapy, topical medications, and surgery, depending on the size and location of the lesions.

The prognosis of multicentric pigmented Bowen's disease is generally good, with most cases resolving with appropriate treatment. However, there is a risk of progression to invasive squamous cell carcinoma in situ, and close monitoring is recommended for patients with this condition. The risk of recurrence is higher in patients with HPV infection, and long-term follow-up is necessary to detect any regrowth of the lesions.
suggests that common pathogenic factors, probably viral, may be associated with carcinoma of the vulva and cervix. Now that multicentric pigmented Bowen's disease is recognised as clinically distinct from carcinoma in situ of the vulva, future epidemiological studies of the disease per se are required to ascertain the true incidence of associated genital malignancies.

In conclusion, it is unlikely that the appearance of multicentric pigmented Bowen's disease with carcinoma of the cervix in this patient was fortuitous. We recommend that patients with multicentric pigmented Bowen's disease should be carefully screened for coexisting carcinoma of the genital tract. Treatment with carbon dioxide laser would appear to be an effective form of treatment for this condition.

References


