Original Research Paper

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Unusual histological forms of penile lesions masquerading as tumours.

Urology

KEYWORDS: Histoplasmosis,Wegener's granulomatosis,Penile tumour

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ABSTRACT

We are presenting two patients with penile tumour like lesions which were suggestive of carcinoma that turned out to be benign with unusual histology of histoplasmosis and Wegener's granulomatosis.

Introduction Wegener's granulomatosis (WG) is a systemic vasculitis of small and medium-size vessels, mostly affecting the respiratory tract and the kidneys, although any organ may be involved.

Histoplasma capsulatum is commonly found in soil contaminated by feces of birds and bats. Most human infections are subclinical. Symptomatic cases are usually manifested as self-limiting respiratory tract infections and disseminated infections are primarily associated with immunosuppression.[1] Skin lesions occur in 4-11% of patients and result from secondary invasion of the skin in patients with disseminated infection. Primary cutaneous histoplasmosis is an extremely rare clinical entity and previously reported cases were mostly related to traumatic inoculation.[2,3]

Case 1

A 50 year old male, found to be seropositive presented with fungating mass over glans penis(figure 1a).The lesioin was excised .Histopathology showed abundant histoplasma cells(figure 1b), with no evidence of malignancy . He was treated with fluconazole for 4 weeks .There was no further recurrence of lesion at one year follow up.

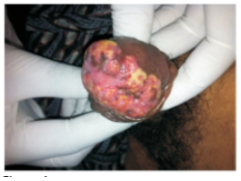

Figure 1a.

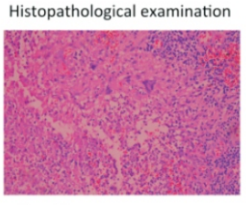

Figure 1b.

Case 2

A 66 year old male , a known case of wegner's granulamatosis presented with urethral discharge with ulcerative lesion over glans(figure 2a).On physical examination ,there were multiple, superficial and deep tender ulcers on the glans penis with ragged ,irregular margins and floor covered with necrotic yellow slough.

The urethral meatus was hidden by these ulcerative lesions.Rest of the genital examination was normal.There was no inguinal lymphadenopathy .His systemic examination was unremarkable. Ulcers were irregular in shape ,had undermined edges with unhealthy granulation tissue at floor.The lesions was mildly tender and were surrounded by minimal induration.His laboratory tests and chest x-rays were unremarkable.A provisional diagnosis of carcinoma of penis was made and a biopsy was taken from the edge of the ulcer .Histopathology was suggestive of wegner's granulomatosis which showed leukocytoclastic vasculitis with necrotic changes and granulomatous inflammation (figure 2b).

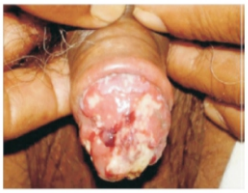

Figure 2a.

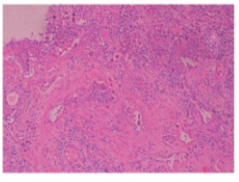

Figure 2b.

Discussion

Histoplasmosis is caused by fungus histoplasma capsulatum.it primarily affects lungs .Genital ulceration by histoplasma capsulatum in patients with aids is a real challenge due to the great variety of differential diagnosis. Systemic mycoses with cutaneous involvement such as histoplasmosis, coccidioidomycosis and paracoccidioidomycosis are usually acquired by pulmonary inoculation through inhalation, and later disseminated to other organs such as the skin. The emergence of isolated skin lesions leads to the possibility of primary cutaneous inoculation, which is difficult to prove.[4] Reports of genital ulcers caused by *Histoplasma capsulatum* are rare and most reports of cutaneous histoplasmosis occurred in immunosuppressed patients.[5] The inoculation process in this report is not clear, since the patient doesn't refer previous genital trauma. Dust rich in spores that might be held in clothes after cleaning contaminated sites is a hypothesis that should be explored.

Despite the absence of immunosuppression signs, the elderly are associated with lower function of cellular immune response as well as worse vigilance against cancer and infectious diseases.[6]

Genital dermatoses comprise several diseases whose clinical manifestations can differ from their elsewhere presentations. Sexually transmitted diseases such as syphilis, chancroid and genital herpes may present as ulcerous lesions with adenopathy; neoplasms, inflammatory such as Behçet disease, traumatic and infectious diseases can have genital manifestations which dermatologists must be aware of.

We report the present case due to its very rare presentation of primary cutaneous histoplasmosis affecting a patient without evidence of immunosuppression or trauma. In our case the penile histoplasmosis mimicked cancer of penis which was treated by wide local excision.

Wegeners granulomatosis is a multisystem disorder characterized by necrotizing granulomatous vasculitis of the upper and lower respiratory tract and glomerulonephritis ,it is life threatening and requires long term immunosuppression.

Involvement of the genital tract is uncommon and is rarely seen in penis,and may mimic a neoplasm.This case presented as phimosis 3 years before the disease revealed its true nature.It is important that wegener's granulomatosis is recognized because its outcome is considerably improved by immunosuppresion ,five year survival being upto 87%.On histopathological examination,a biopsy will show leukocytoclastic vasculitis with necrotic changes and granulomatous inflammation.Initial treatment is corticosteroid and oral cyclosporine ,once remission is attained (normally 3 to 6 months),treatment is changed to azathioprine or methotrexate[7,8].

Conclusion

Detailed history ,clinical examination presence of other comorbidities should be taken in to account in diagnosing the penile lesions masquerading as tumours. Unusual lesions of the penis

should be biopsied for both bacteriological and histological assessment.

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