Palisading Granuloma of the Penis: An Unusual Location for a not Uncommon Disease

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Abstract

Granuloma annulare (GA) is an inflammatory disease of the dermis characterized by focal degeneration of the collagen with surrounding areas of reactive inflammation and fibrosis. GA of the penis is a remarkably uncommon presentation of this benign condition. We are reporting a new case.

Keywords: Granuloma annulare; Rare; Penis; Uncommon

Introduction

Granuloma annulare (GA) is an inflammatory disease of the dermis characterized by focal degeneration of the collagen with surrounding areas of reactive inflammation and fibrosis. Deep GA is the least common form of the disease and most commonly affects the bony prominences of children < 5 years old. GA of the penis is a remarkably uncommon presentation of this benign condition, with only few cases previously reported in published studies [1] we are reporting a new case.

Case Report

It was a 19 year-old-patient, with no significant pathological history, consulting for the appearance of several nodules on the penis (Figure 1,2), painless and non-pruritic evolving for 2 months, no other cutaneous lesions was noted. Serological examinations screening tests (HIV, syphilis, Hepatitis B/C) were negative. Histological analysis performed on the biopsy found the presence of epitheloid cells (Figure 3) with a necrotic center in places and a few rare giant cells (Figure 4,5), concluding to a palisading granuloma, the evolution was marked by the spontaneous regression of lesions after 6 months.

Discussion

Granuloma annulare is a relatively common idiopathic disorder of the dermis and subcutaneous tissue characterized by interstitial and palisaded granulomas with mucin. Deep GA is characterized by palisading granulomas surrounding fibrin, an appearance similar to that of a rheumatoid nodule [2,3]. Subcutaneous GA is the only variant with a male preponderance. Multiple lesions are usually present, and a history of trauma is often reported. The subcutaneous nodules are firm, usually non tender, skin-colored and can be up to several centimeters in diameter. GA of the penis is a benign, uncommon condition, with only a few cases reported worldwide. The age at diagnosis has ranged from 7 to 61 years old, and GA typically affects men in their third decade of life. Most of the patients had multiple lesions located on the shaft of the penis. None of the patients had any genitourinary symptoms. Although these lesions are typically asymptomatic, these penile nodules can be associated

Figure 1 Multiple subcutaneous nodules of the penis.

Figure 2 Multiple subcutaneous nodules of the penis.
with significant psychological distress [2]. The most important entities to consider in the differential diagnosis are infectious granulomas, Peyronie’s disease, and epitheloid sarcoma [4]. An accurate diagnosis depends on clinical suspicion and histologic examination [3].

The adequate treatment of GA is not yet clear, and results have shown considerable variability. Localized GA is self-limited, and usually, treatment is not required. Liquid nitrogen and steroids, injected or topical, may be considered in selected cases. Options for the treatment of disseminated GA include dapsone, retinoids, antimalarial drugs, tacrolimus, or pimecrolimus [5,6]. Subcutaneous GA is asymptomatic, may resolve spontaneously, and there have been no reports of progression to systemic disease. Options for the treatment are similar to those for other forms of localized GA [6,7]. In the cases reported on the penis, removal of the lesion was done in 8 patients and clinical follow-up is available in 6, with relapse of the lesions in 2 of these cases, months after surgery. Intraluesional injection of corticosteroids was done in 2 cases with only partial response. In 1 case, the lesion disappeared after circumcision [1].

In summary, we report a new case of GA of the penis in a 19 year-old-patient. The lesions resolved spontaneously after 6 months. Surgical treatment is probably not required and accurate diagnosis is a prerequisite [8]. The occurrence of GA in the penis exemplifies the phenomenon of a common disease occurring in an uncommon location, which brings to mind Dr Rosai’s observation in relation to Dr Ackerman’s “The man from Istanbul” syndrome [9].

Conclusion

Penile subcutaneous granuloma annulare is an inflammatory disorder that can present to practicing urologists or dermatologists. It can affect men of all ages, including adolescents. Because the lesions are typically asymptomatic, many patients might go undiagnosed.

References

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