

Nummular dermatitis mimicking surgical site infection in a diabetic

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Abstract

Various skin lesions are described in diabetic patients which require identification and specialist opinion regarding the management. Discoid or nummular dermatitis is commonly associated with dry skin and has been found in diabetic and non - diabetic population. Proper identification and exclusion of this lesion is sometimes required to avoid its misdiagnosis as superficial skin or soft tissue infection especially over a previous surgical site.

Keywords: diabetes, skin disorder, dermatitis, skin lesion

Introduction

Nummular dermatitis (Latin, nummular - coin) is also known as nummular eczema, discoid eczema or orbicular dermatitis. It typically presents as chronic, coin or disc shaped eczematous skin lesion with rash, plaque or papulo-squamous presentation. It often accompanies redness, itching or swelling and is recurrent and nagging problem. These lesions are commonly found in extremities like legs but can also be found in trunk, hands and feet etc [3]. The lesion can be, at times, misdiagnosed as skin infection and may result in inappropriate management.

Case Report

A 63 year-old-male patient presented to us as a follow up case of elsewhere done surgical fixation of proximal tibia fracture six months back. He complained of recurrent lesions over the upper tibia shin adjacent to distal incision site. The incision site was healed and there was plaque like skin lesion with history of occasional oozing and redness (Fig.1). It was not associated with localized raised temperature or features of inflammation. There was no palpable metallic implant or tenderness. The ankle dorsiflexors were normally moving on plantar and dorsi-flexion activities under the lesion. He was long standing diabetic on oral hypoglycemic for the last 15 years and was on insulin during peri-operative period. There was no history of any peri or post-operative complication of surgery except delayed wound healing. There was no similar lesion elsewhere. The radiograph of the leg showed healing fracture with well-placed bone plates over lateral and medial aspect of proximal tibia with no implant related complication. He was managed by some other practitioner for surgical site infection and relevant blood investigations done. He was given oral linezolid 600 mg. in twice a day dosage for the last ten days before he consulted us. The skin consultation done by us and the diagnosis of discoid eczema was made on clinical basis. He was managed by emollients creams by skin department and the skin lesion showed gradual healing. Long term regular follow up was advised and the patient is still undergoing periodic evaluation.

Figures/ Legends



Fig 1: The discoid skin lesion over the proximal shin adjacent to previous surgical incision site that was previously treated as superficial surgical infection and later diagnosed as discoid or nummular eczema.

Discussion

Xerosis or dry skin, a common skin lesion associated with is diabetes mellitus, is also associated with discoid eczema among other causes. Xerosis is second most common skin lesion found in diabetes to the tune of 26.4% to 50% in two separate studies [2, 3]. Diabetes has been associated with increased incidence of surgical site infections and atopic dermatitis has been associated with higher risk [4]. Various skin lesions are reported to complicate surgical sites with orthopedic implants like pyoderma gangrenosum [5]. Nummular dermatitis can be misdiagnosed as ring worm or psoriasis and may undergo irrational treatment. The presence of new lesion over a previously normal surgical site may be confused with superficial surgical site infection by way of similar appearance and clinical features in presence of redness and warmth over the lesion. The misdiagnosis of surgical site infection may lead to unnecessary investigations and antibiotic consumption. The knowledge of characteristic skin lesions helps in the setting of diabetes and this short case snippet thus have an educative potential.

References

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