



Multiple skin symptoms and signs in a type 2 diabetes patient

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Introduction

Although type 2 diabetes mellitus is commonly associated with vascular complications,¹ here we present a case of multiple skin involvement in a patient with type 2 diabetes. This case emphasises the clinical importance of cutaneous manifestations of diabetes: due to their persistent characteristics, such lesions may be misdiagnosed as signs of purely dermatological disease. Nurses working in diabetes care are often asked for medical advice by patients with diabetes. Consequently, they should be aware of, and alert to, the potential skin changes that may occur with longstanding diabetes.

Case history

A 57-year-old man with a 10-year

Abstract

Background: Cutaneous signs of diabetes occur frequently but are rarely acknowledged, and may be easily misdiagnosed as signs of a purely dermatological disease. The role of nurses in recognising skin changes in diabetes cannot be underestimated.

Aim: This paper presents a case of multiple skin manifestations of diabetes in a male with type 2 diabetes mellitus. These skin changes persisted without change over time, despite an improvement in metabolic control of diabetes.

Conclusions: Skin lesion development may be a late complication of diabetes. Due to the potential risks with which such lesions are associated (e.g. the development of diabetic foot lesions), cutaneous skin lesions should be carefully monitored, preferably with the help of qualified nursing staff.

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Key Words

Type 2 diabetes; skin symptoms; diabetic foot syndrome

history of type 2 diabetes, who had been treated with insulin for two years, was referred to our department due to poor metabolic control and significant symptoms of distal symmetrical polyneuropathy. His main concerns, though, were red-brown round lesions on both shins, that had been present for several months (Figure 1A, arrows). The patient sought advice from a dermatologist, but no particular treatment was recommended at that time.

Upon presentation, the patient was well and complained only of unstable blood glucose levels and periodical lower-leg numbness, although he also had kidney stones and a history of recurrent left-shoulder capsulitis. His body weight was 90.5 kg, height 180 cm, blood pressure 110/75 mmHg. Foot and lower-leg sensations as well as ankle and knee jerks were absent, confirming the presence of distal symmetrical diabetic polyneuropathy. His glycosylated haemoglobin (HbA_{1c}) level was 9.2% (normal $\leq 6.0\%$), confirming poor metabolic

control of the diabetes. The patient was on medication including biphasic insulin 30/70 twice daily (total daily dose 42 IU), metformin 500 mg t.i.d. and aspirin.

Physical examination revealed several skin changes typical of longstanding diabetes. There were red-brown round lesions on both shins, characteristic of diabetic dermopathy (Figure 1). The patient also had hyperkeratotic foot skin (most advanced in his toes, Figure 2) with a protruding and partially parted right great toe nail, that he was afraid of cutting. Dark discolourations on the nails of the great and second toes were signs of resolving bruises, that had been caused by wearing new shoes. Detailed examination of the patient's palms revealed pronounced digital flexor tendon thickening (Figures 3 and 4, arrows) with limited joint mobility (signs consistent with the initial stage of Dupuytren's disease).²

Comments

Cutaneous symptoms associated with diabetes are frequently found,

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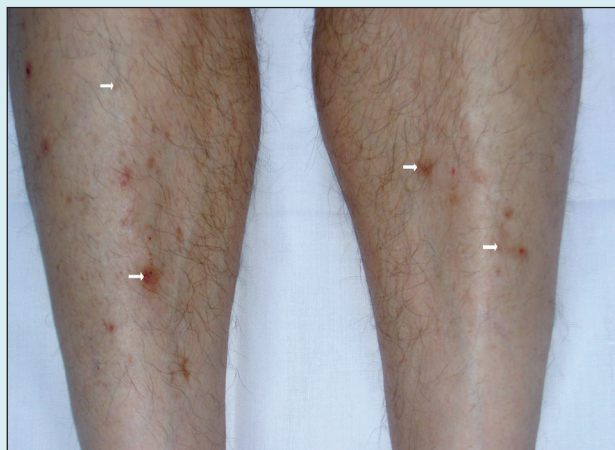


Figure 1. Red-brown round lesions



Figure 2. Hyperkeratotic foot skin

with some lesions occurring more often in men than in women (e.g. Dupuytren's disease).³ However, multiple involvement of connective tissue in this disease is rarely observed.⁴ Improving the metabolic control of diabetes is considered to be the most appropriate treatment of this type of disease complication,⁵ therefore in the present case the patient's insulin regimen was changed to multiple daily injection mode, with a total insulin daily dose of 58 IU.

Despite markedly improved glucose control (HbA_{1c} 7.5%), after one year the cutaneous shin lesions and the symptoms of Dupuytren's disease had not improved.

The patient had become concerned when he first noticed the

cutaneous changes, seeking specialist help from a dermatologist. However, simple advice from a nurse working with diabetes patients enabled him to understand the symptoms he had noticed. Thus, the role of qualified nursing personnel in helping patients to recognise the complications of diabetes is of the utmost importance in everyday clinical practice.

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Figure 3. Pronounced digital flexor tendon thickening

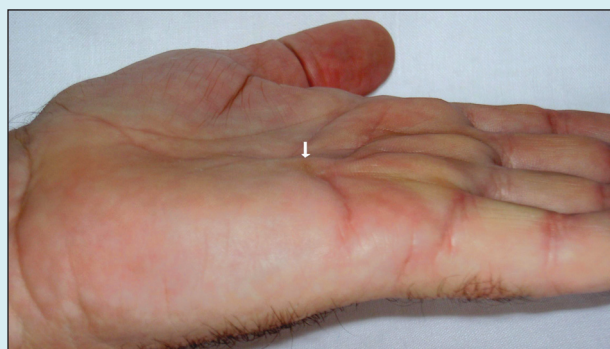


Figure 4. Pronounced digital flexor tendon thickening