

# **A STUDY OF DERMATOSES IN 100 HOSPITALIZED DIABETICS**

Pages with reference to book, From 167 To 168

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## **Abstract**

One hundred hospitalized diabetics were examined for the presence of cutaneous manifestations. Sixty eight of them had dermatoses associated with diabetes or its therapy. Six of them presented with skin complaints at admission. The incidence of various dermatoses was comparable with other published works except that there was a relatively high incidence of hypermelanosis (8%) and an absence of cutaneous side effects of oral hypoglycaemics. Finger pebbling (15.7%) as a new marker of diabetes is also discussed (JPMA 38 :167, 1988).

## **INTRODUCTION**

Diabetes mellitus affects almost every system of the body and a variety of skin lesions occur in patients. This study was to find out the cutaneous manifestations of diabetes mellitus and compare them with other published works.

## **PATIENTS AND METHOD**

This study was conducted over 4 months, from June to September 1986. One hundred diabetics, irrespective of reasons for their admission, were examined in the wards of Jinnah Postgraduate Medical Centre, Karachi, and a 3 page proforma was filled which included salient features of history and detailed examination of skin, nails and hair. The majority of patients seen were in the 5th decade, followed by those in the 4th and the 6th decades. There were 55 males and 45 females. Forty three patients were either on oral or insulin therapies and five were on combined therapies. Nine patients were only on a carbohydrate restricted diet.

## **RESULTS AND DISCUSSION**

Sixty eight percent had dermatoses associated with diabetes or its therapy as shown table.

**Table. Dermatoses in Diabetics.**

<b>Bacterial infections</b>	<b>18%</b>
e.g. carbuncles, furuncles, cellulitis, abscesses and paronychia	
<b>Finger pebbling</b>	<b>15.7%</b>
<b>Hypermelanosis</b>	<b>8%</b>
<b>Hyperhidrosis</b>	<b>8%</b>
<b>Generalized pruritus</b>	<b>7%</b>
<b>Fungal infections, e.g., tinea cruris and     tinea versicolor</b>	<b>6%</b>
<b>Insulin complications</b>	<b>5%</b>
<b>Hypohidrosis</b>	<b>5%</b>
<b>Gangrene</b>	<b>4%</b>
<b>Candidal infections, e.g., candidal vaginitis     and candidal intertrigo</b>	<b>3%</b>
<b>Localized pruritus</b>	<b>2%</b>
<b>Xanthelasma palpabrarum</b>	<b>2%</b>
<b>Hypomelanosis</b>	<b>1%</b>

The incidence of various dermatoses tallies with other studies<sup>1,2</sup> except for the few findings discussed below. Hypermelanosis with diabetes is a recognized feature of haemochromatosis,<sup>3</sup> but hypermelanosis occurring in diabetes without any evidence of liver disease is not considered significant except for the cases of insulin pigmentation. Eight patients had hypermelanosis; 4 had patchy hypermelanosis on the limbs, 1 had generalized macular hypermelanosis and 3 patients had hypermelanosis on exposed areas and in these 3 cases pigmentation preceded the diagnosis of diabetes. Finger pebbling is a visual marker of skin thickening. It appears as a cobblestone pattern on the knuckles and distal phalanges. It is fairly common among manual labourers. Huhtley and Davis recently described this feature to be present in 75% of diabetics<sup>4</sup>. This sign could not be looked for in the first 30 cases as their examination and followup had been completed by the time the new sign was published. In the remaining 70 patients, all male, this feature was present in 11 patients i.e. in 15.7%.

Cutaneous reactions to insulin have been reported by Jegasothy to be in the range of 10 — 56%<sup>5</sup>. In our study the incidence was 10.4% and included localized hyperpigmentation, lipodystrophy, scars and nodules. All the cutaneous side effects of the drugs were due to insulin and none due to oral hypoglycaemics although their complications are quite frequent and documented. These include vasomotor, allergic and photosensitive skin eruptions among others.<sup>6</sup> The findings of this study compare favourably with other published works except for the few things which have been discussed. Although some of the specific dermatoses of diabetes such as diabetic dermopathy, necrobiosis lipoidica diabetorum, granuloma annulare, eruptive xanthoma, etc. were not discovered in our series, possibly because their incidence is relatively low.

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