Prevalence and the associated factors of cutaneous manifestations in Chinese patients with type II diabetes mellitus in a primary care diabetes clinic in Hong Kong

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Introduction
Studies suggested that cutaneous manifestations in diabetes patients were prevalent (62.5% to 88.3%). Acute metabolic derangements and chronic complications were postulated as the causes of many skin diseases in diabetes patients. Most of the skin conditions can be prevented and successfully treated if detected early. However, the local prevalence data was lacking. It is important to raise the awareness of physicians on these under-investigated conditions through this study.

Objectives
(1) To evaluate the prevalence of cutaneous manifestations in Chinese patients with type II diabetes mellitus in a primary care diabetes clinic
(2) To study the associated factors of these cutaneous manifestations

Methodology
This was a cross-sectional study carried out in a diabetes clinic in a General Out-patient Clinic. All Chinese patients attended the clinic from 13th July 2017 to 23th November 2017 were recruited. For patients agreed to participate in the study, detailed skin history, physical examination, investigations and treatment would be offered accordingly. Clinical findings were documented in a consultation template. Relevant demographic data and latest clinical parameters were retrieved from computerized medical records.

Result
271 patients were recruited. 52.8% of the subjects were male. The mean duration of diabetes was 13.5 years. The mean haemoglobin A1c level was 8.0%. 32.5% of patients were put on insulin. 74.9% of patients were overweight or obese. The prevalence of cutaneous manifestations was 59.4%. The most common groups of skin disorders were skin infections (28.4%), other skin diseases not known to be
associated with diabetes such as atopic eczema and seborrheic keratosis (21%) and skin diseases associated with diabetes such as acanthosis nigricans, diabetic dermopathy and diabetic thick skin (18.1%). Fungal skin infections and xerosis were the two most common diagnoses. Male gender and body mass index (BMI) were found to be statistically significant risk factors of skin diseases with OR 1.79 (CI 1.08-2.96) and OR 1.08 (CI 1.02-1.16) respectively. Skin diseases were prevalent in Chinese diabetes patients. Male gender and increased BMI were the risk factors identified. Weight control may be important in the prevention of skin diseases in diabetes patients.