Setting management priorities for patients with diabetic foot ulcers in the United Arab Emirates

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INTRODUCTION:

The overall prevalence of diabetes in the United Arab Emirates is high, ranging between **20 and 24%.** UAE nationals make up only about 1/5 of the total population, which includes 80% ex-pat workers The adequacy of diabetes management among nationals with diabetic ulcers is unknown.

In the UAE, many nationals with complex ulcers tend to resist amputation even when the chances of saving a digit or limb are low. They may instead opt for further time-consuming medical opinions when faced with "bad news", thereby delaying a prompt and definitive foot saving treatment.

Both situations predict a less favorable outcome, as the foot and the patient inevitably are sicker if or when, the surgery is finally done.

Subsequent rehabilitation is more difficult, and the chances of such a patient regaining his/her former lifestyle diminish drastically. The likelihood of an older person with diabetes regaining useful assisted mobility after a below-knee amputation may be less than 40%; the likelihood after an above knee amputation may be <10%.

From our previous work, up to 25% of local patients with foot ulcers are known to be non-adherent to culturally-appropriate professional advice.

Defining management priorities for this group is an ongoing challenge.

AIM:

1) To determine the disease profile of a cohort of 117 diabetic patients with foot ulcers.
2) To set management priorities.

METHODS:

Data were collected over a 6-month period on consecutive UAE national patients with diabetic ulcers seen at SKMC in the ambulatory and hospitalized settings.

RESULTS:

Overall mean age of cohort = **59.4 yrs**
Ratio of men: women = **56:44**.
All were type 2 diabetics with **2/3** of the cohort receiving insulin.

PARAMETER	AMBULATORY	HOSPITALIZED
Composition of cohort (# of pts)	**85**	**32**
Additional patient risk factors (Median #)	3	3
Proportion of cohort with ulcer <3mos duration	66%	**73%**
%age of pts with detectable peripheral pulses	87%	**50%***
Proportion of cohort with specific U Texas classification	A: 50% B,C,D: 50%	A: **8%*** B,C,D: **92%***
Mean HgbA1C (%age)	9.1%	9.7%
Mean serum albumen (g/L)	32.9 g/L	**22.5 g/L***
Proportion of cohort with associated foot abscess, gangrene, Charcot or cellulitis	14/85 or 16%	**14/32 or 43%***

* p<0.05

DISCUSSION:

Our UAE nationals cohort was younger than a similar group that would be found in a western setting. As expected, most patients had additional risk factors that complicated their health including hypertension, smoking, vascular disease. Poorly controlled diabetes was a consistent problem among our diabetic ulcer patients. Hospitalized patients were sicker with more advanced disease, worse nutritional status, and more acute limb- and life-threatening complications.

CONCLUSIONS:

Patients with diabetic foot ulcers have **multiple additional risk factors** that can retard healing rates, including vascular disease, hyperlipidemia, neuropathy and renal disease, including transplant.

Hospitalized patients tend to have **more complex ulcers** (B, C, D), concomitant **vascular disease**, **poor nutritional status** (based on serum albumen values), and associated complications, as compared to ambulatory patients.

Our cohort had **poor diabetes control** (i.e. HgbA1C >9%)

Priorities for management for this group require:

1) More focused control of diabetes (goal: HgbA1C < 7%),
2) Improved clinical assessment (goal: early recognition/treatment of wound infection),
3) Goal: early recognition of complications that force hospital admission
4) Targeted culturally-sensitive education to improve adherence to advice (goal: train local practitioners in effective wound care).

References:

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