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Wandering Through the Complex Mindset of Diabetic Foot Patients

Sangeetha Kalabhairav[1]*, Sanjay Vaidya[2] and Bharat Vatwani[3]

[1]Asst Proff, KIMS, Hubli Karnataka Consultant Diabetic Foot, Nail Surgeon and Wound care specialist, Sparsh Diabetic Foot and Advanced Wound Care Clinic, Marvel Artiza, Karnataka, India

[2]Proff , Dept of Diabetic Foot Surgery, SL Raheja Hospital (Fortis), Mahim West, Mumbai, Maharashtra, India

[3]Founder Trustee, Shraddha Rehabilitation Foundation, Vengaon Village, Taluka Karjat, District Raigad, Maharashtra, India

***Corresponding author**

Dr. Sangeetha Kalabhairav, Asst Proff , KIMS, Hubli Karnataka Consultant Diabetic Foot, Nail Surgeon and Wound care specialist, Sparsh Diabetic Foot and Advanced Wound Care Clinic, Marvel Artiza, Vidyanagar,Hubli–22, Karnataka, India.

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When I saw Mrs. XYZ elderly female patient was brought to my OPD for my consultation by her family member. The patient was blissfully unaware of the fact that her foot wound had crawling maggots! Knowing that she was a diabetic for the last 15 years I decided to do a complete foot and limb evaluation as well a complete examination of the patient. I learnt that she was psychologically depressed.

Another young woman of 32 years, dependent on Insulin since the age of 8 years, needed several hospital admissions for her foot wounds over 5 years. She had a non-healing ulcer under her first metatarsal head which had been present for more than three years. I planned to immobilise her on a foot cast with appropriate dressings. A diagnosis of Munchausen foot lesion - deliberately caused by application of caustic substance which was detected by testing the pH of the lesion was made. On one of dressing sessions, when her cast was being changed, we noticed that she injured herself by hitting the ulcer hard with her fist causing bleeding and damage to the wound.

These two instances have initiated my foray into the presence of psychological concomitant co-morbidities in the diabetic foot patient, whether these co-morbidities had any long-term impact on the final outcome, and whether we as treating surgeons/physicians need to evolve in our approach to our diabetic foot patients, and from this journey has resulted this presentation.

‘’The podiatric surgeon must be willing and able to positively influence the mental state of their patients.’’

And it would be to advantage if there was

a) a trained psychologist specific to dealing with long term rehabilitation of diabetic foot disease working in conjunction with the podiatric surgeon or
b) the podiatric surgeon himself/herself has received additional training to help out in the psychological ramifications manifest of the diabetic foot patient.

Giving hardcore data -

A) Foot wounds in people with diabetes mellitus (DM) are a common and serious global health issue [1].
B) Foot Ulcers in patients with diabetes are complex and treatment is often difficult.
C) The lifetime risk for foot ulcers in people with diabetes has been estimated to be 15 % with a 3% risk of lower limb amputations during their lifetime [2].
D) The overall risk of amputation is increased by 15 folds in diabetics than non-diabetic population [3].
E) Diabetes remains the major cause of non-traumatic lower extremity amputations (LEAs) in up to 85% of all cases, which is 15 times more than the general population [4].

This coupled with the data that

A) Depression is a common and very serious medical disease with a lifetime prevalence ranging from approximately 11% in low-income countries to 15% in high-income countries. (6)
B) The risk of having a mental health problem in life is of about 50% and this leads to a drop in employment and daily wages [7].
C) Depression and anxiety are the 4th cause, while diabetes is the 8th cause of disability adjusted life years (DALYS) in developed countries [8].
D) The coexistence of depression with DM also results in poor glycaemic control, lack of self-esteem, poor self-care, lack of physical activity, poor adherent to diabetic diet and medication and patients end up in substance abuse.
E) Depression leads to anxiety, low quality of life, increased use of healthcare logistics and cost [9].
F) Patient becomes debilitated and might lose life if it is not addressed early.

Foot problems are among the most distressing complications of diabetes, and more hospital beds are occupied by patients with foot problems than by patients with all the other complications of diabetes. Patients come to know these facts only after seeing the

wheel-chair-bound major amputees before them. The gangrene and mutilation seem very heart touching and disastrous. Some patients who have good compliance face a lot of issues like life-time monitoring of their sugar levels, restrictions of diet and constant worry about foot problems. Worst part is that patients face intractable pain, vision problems, kidney ailments, gangrene, major amputations and may succumb to death. Loss of employment is a problem for many affected by ulceration or amputation, particularly those in occupations which involve walking or standing for long and is associated with reduced self-esteem especially for youngsters. Patients have worse things to face - anger, fear, denial, depression and guilt leading to the boredom of having to cope with this health issue life-long and then they get bounded with day-to-day life that is unforgettable. Restrictions in mobility are particularly hard for diabetic patients with foot ulcers. Patients are generally concerned with becoming a burden on their family in terms of their daily self-care, shopping, cooking and transportation to frequent medical appointments. Reactive Anxiety, Reactive Depression, Reactive Suicidal Ideation in the patients and the caretakers are common and oft-neglected fallouts.

"Every 20 seconds a limb is lost due to diabetes"

No wonder these strong emotions will devastate the patient's perceptions about their life, and lead to non-compliance and refusal to follow advice or accept the care offered to them by their clinicians.

If patients have a family history of diabetes and have seen their relatives suffering from foot problems like gangrene then fear of suffering the same fate may come in front of their eyes. They may go into reactive anxiety-depression, become scared, and check their feet multiple times a day, imagining the colour changes as the precursors of gangrene. They tend to come to the clinic several times a month without appointment, because they falsely imagine that they have foot problems. This is termed as reactive hypochondriasis.

Fear can be a particular problem with newly diagnosed diabetics, and may be due to insensitive handling of such patients in the early stages of the disease. The experience of being admitted to hospital and put in wards where there are other diabetic patients with severe complications can be a nightmare leading to fear, anxiety and panic attacks [5].

Psychosocial Consequences of Foot Ulcers or Amputations
A) Depression
B) Alterations in one's self-image as a disabled person,
C) Alterations in body image,
D) Problems in family relationships,
E) Dependency on spouse,
F) Alterations in social relationship,
G) Problems in social adjustments,
H) Getting isolated to self,
I) Sleep disturbances,
J) Loss of sexual desires & personal interest.
Losing a body part is like losing a part of self, almost akin to losing a loved one and can result in acute as well as long-term grief reactions.

''If we tell a diabetic patient to draw their self-images, they would draw themselves without a foot.''

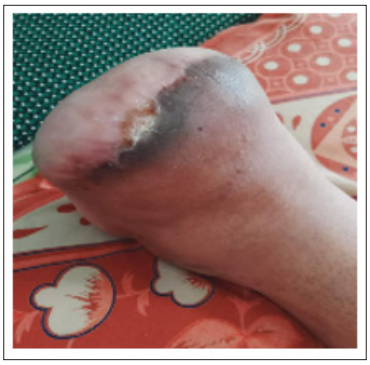

Figure 1: Original Picture

The above enumerated various psychological fall outs of diabetic foot can lead to long-term behavioural issues, maladaptive patterns of functioning, disruption of social and family ecosystem and untold chronic damage in both the patient's and the near one's productivity. Lastly and the most serious fallout being deliberate self-harm, which coupled with suicidal ideation, can culminate into suicide.

How can we avoid these emotions? Or rather how do we deal with them in a clinical setting. This is indeed a great dilemma. Important aspects of tackling the diabetic foot by us clinicians –

a) Podiatric Surgeon has to reassure patients, but also avoid giving them false assurances and inappropriate information they will be alright. If things start going wrong the patient will never trust our judgement again, and will be even more frightened and angry.
b) Poor understanding may lead to confusion, resulting in noncompliance which is quite inadvertent on the part of the patient. We must try our level best to convince the patient that we can help them out [10].
c) Of all the complications of diabetes, foot problems are the easiest to prevent and can be treated. If the patient is taught how to look after the feet, he will feel good and come to a realistic view of the likely outcome.
d) As majority of diabetic foot problems begin as a small lesion which is either neglected or treated inappropriately, patients can be reassured that they are not as helpless as they think.
e) They will feel secure when they have extensive knowledge. All patients should be taught the alarming signs of foot attacks.
f) They can be given a telephone number for emergency access. They feel safer when help and advice is available.

Unfortunately, neuropathic and ischaemic ulceration can strike apparently without warning, and can become akin to life sentences. Patient may land up in sepsis.

The deep-seated fears associated with diabetic foot problems can affect the patient's family and friends too. In many instances the spouse of a patient with an ulcerated foot becomes extremely over protective. Some relationships will break down because wives and husbands find it hard to be dependent on their spouse.

Advice given to patients on footwear and footcare may be inappropriate, given at the wrong time, or patient badly presented. Poor understanding on the part of patient or carer may lead to inadvertent non-compliance.

It is of course, very important to be open-minded when it comes to consideration of the reasons for non-compliance. What seems like deliberate non-compliance and even wilful self-neglect on the part of the patient may all along be due to failure on the part of the health professional as well.

Figure 2: Original Picture

Psychology and the team having a psychiatrist/psychologist as a member of the team can be helpful to the podiatric surgeon, the staff as well as the patients. Psychological support can be a major advantage of working as a member of a team instead of in isolation.

Managing the Psychological Co-Morbidities –

a) Depressive disorders are usually responsive to treatment with medications or psychotherapy. Both treatments are effective, used alone or in combination.
b) Early referral of such patients is important. Those with suicidal ideation are at serious risk and need immediate referral to psychiatric care. A mental health professional will help evaluate the success of therapy, institute combination therapy using counselling as well as medication, individualize pharmacotherapy, and evaluate the need for hospitalization.

One major point Dr. Brand emphasizes is that people who are healing need to feel that they're not alone in their disease. Someone is in on this mission with them and cares about the outcome as if they were their close family. That is exactly why, as research shows, that people with a close family structure and support do much better in the healing arena. Dr. Brand goes on to say, "You can feel pain for them even though they don't feel pain themselves, and you can show distress for them like you are in partnership with them, as we're working on our foot together.

"The most salient feature of diabetic foot surgeon is he/she must tune in to the mind of the patient and create the trust."

In conclusion, psychological problems affect both clinical care and outcome in diabetic foot problems and the diabetic foot surgeon must be aware of the part he/she can play.
As ''No one is perfect, that's why pencils have erasers''

The most important issue in the care and the rehabilitation of the diabetic foot patient, for which this presentation is making a strong pitch for, is to understand that psychological issues are inherent to the problem and it is more the rule than the exception of the presence of psychological issues in every diabetic foot patient. This paper is making a strong proactive plea to address the entire gestalt of the problem - be it with individual counselling, marital and family counselling, group therapy, pharmacotherapy, addressing underlying concomitant psychiatric co-morbidities (often missed and neglected), or be they even concomitant medical co-morbidities.

There should be and must be psychological screening of every patient of diabetic foot by a trained qualified psychologist/ psychiatrist.

The patient is more than a foot 'diseased', he/she is an entire body of different organs and emotions in synergistic communion with one another, the whole of which far surpasses the sum total of its parts. And the wise podiatric surgeon shall be / will be doing immeasurable service to the patient by addressing this whole rather than just the isolated diseased foot [11].

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