Diabetic hand syndrome with scleredema diabeticorum, sclerodactyly and Dupuytren contractures

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A 57-year-old woman with poorly controlled hyperglycaemia (HbA1c of 8%) was admitted for glycemic control. She has had diabetes for 22 years with several micro and macro vascular complications. She had thickening of dorsum of her hands and fingers(sclerodactyly) with limitation of finger flexion. There were tapering of few fingers, indurated, waxy skin overlying the digits, Dupuytren contractures and healed scars from past bullous diabeticorum (Figure 1). Thickening of the skin of upper anterior chest wall (Scleredema) was noted (Figure 1). The history did not reveal any Raynaud phenomenon or inflammatory arthropathy. The other clinical features to suggest systemic sclerosis such as telangiectasia, calcinosis, speckled leucoderma were absent. There was normal nail fold capillaroscopy, and normal autoimmune markers which made the diagnosis of systemic sclerosis unlikely.

Diabetic hand syndrome, which is seen in longstanding poorly controlled diabetes, is a clinical entity characterized by several musculoskeletal and cutaneous manifestations including diabetic cheiroarthropathy, flexor tenosynovitis, Dupuytren contractures, diabetic sclerodactyly, carpal tunnel syndrome and Charcot (neuropathic) arthropathy.(1) Glycosylation of connective tissue proteins, microvascular injury, microvascular peripheral nerve damage, collagen deposition in cutaneous and periarticular structures are contributive.(1) The condition is an important cause of progressive deformity, disability, pain, poor quality of life of diabetic patients.(2) Potent topical and intralesional glucocorticoids, strict glycaemic control, low-dose methotrexate, prostaglandin E, colchicine, dimethyl sulfoxide, aminobenzoate and physiotherapy have been considered as potential management options. (3)

References

Figure 1 - Panel A: dorsum of hand with indurated waxy skin of digits, sclerodactyly and healed bullous diabeticorum (arrow); Panel B: sclerodactyly, tapering of fingers, limitation of finger flexion and Dupuytren contracture (arrow); Panel C: induration of skin of upper chest (diabetic scleredema)

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