

THE CLINICAL PICTURE

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The Clinical Picture

Thick skin on the back

The wood-like thickening of the skin has been present for 3 years



FIGURE 1. Erythematous induration of the skin limited to the back.

A 66-YEAR-OLD OBESE BLACK WOMAN with long-standing uncontrolled type 2 diabetes mellitus (hemoglobin A_{1c} 15.1%) presents with an indurated, wood-like thickening of the skin on her back, with mild pitting (**FIGURE 1**). This condition has been present for 3 years

and is associated with diffuse erythema. She denies any history of Raynaud phenomenon, arthralgias, dysphagia, or rashes. Her antinuclear antibody titer is highly positive at 1:640 dilution, with a speckled pattern. All other autoantibody tests (antitopoisomerase-I, Sjögren antibodies, anti-Smith and anti-Smith/ribonucleoprotein, and antiphospholipid antibody-

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ies) are negative. Serum electrophoresis and urinary porphobilinogen levels are normal.

Q: Which is the correct diagnosis?

- ☐ Scleroderma (systemic sclerosis)
- ☐ Scleredema diabeticorum
- ☐ Amyloidosis
- ☐ Cutaneous sarcoidosis
- ☐ Porphyria cutanea tarda

A: The correct answer is scleredema diabeticorum, a common, underdiagnosed skin manifestation of uncontrolled diabetes mellitus seen in 2.5% to 14% of diabetic patients.^{1,2} It most often presents with the insidious onset of painless induration and nonpitting thickening of the skin, predominantly on the upper back and neck. Biopsy of the skin usually reveals thickening of the dermis with deposition of collagen and hyaluronic acid without an inflammatory infiltrate.³

Of note, patients may present with similar skin changes acutely in conditions such as postinfectious scleredema (scleredema of Buschke) and paraproteinemias.

Treatment of scleredema is usually difficult, but options include radiotherapy, ultraviolet

light therapy, low-dose methotrexate, psoralen, and extracorporeal photopheresis.⁴⁻⁷ ■

REFERENCES

1. Cole GW, Headley J, Skowsky R. Scleredema diabeticorum: a common and distinct cutaneous manifestation of diabetes mellitus. *Diabetes Care* 1983; 6:189-192.
2. Sattar MA, Diab S, Sugathan TN, Sivanandasingham P, Fenech FF. Scleroedema diabeticorum: a minor but often unrecognized complication of diabetes mellitus. *Diabet Med* 1988; 5:465-468.
3. Varga J, Gotta S, Li L, Sollberg S, Di Leonardo M. Scleredema adultorum: case report and demonstration of abnormal expression of extracellular matrix genes in skin fibroblasts in vivo and in vitro. *Br J Dermatol* 1995; 132:992-999.
4. Seyger MM, van den Hoogen FH, de Mare S, van Haelst U, de Jong EM. A patient with a severe scleroedema diabeticorum, partially responding to low-dose methotrexate. *Dermatology* 1999; 198:177-179.
5. Lee MW, Choi JH, Sung KJ, Moon KC, Koh JK. Electron beam therapy in patients with scleredema. *Acta Derm Venereol* 2000; 80:307-308.
6. Bowen AR, Smith L, Zone JJ. Scleredema adultorum of Buschke treated with radiation. *Arch Dermatol* 2003; 139:780-784.
7. Beers WH, Ince A, Moore TL. Scleredema adultorum of Buschke: a case report and review of the literature. *Semin Arthritis Rheum* 2006; 35:355-359.

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