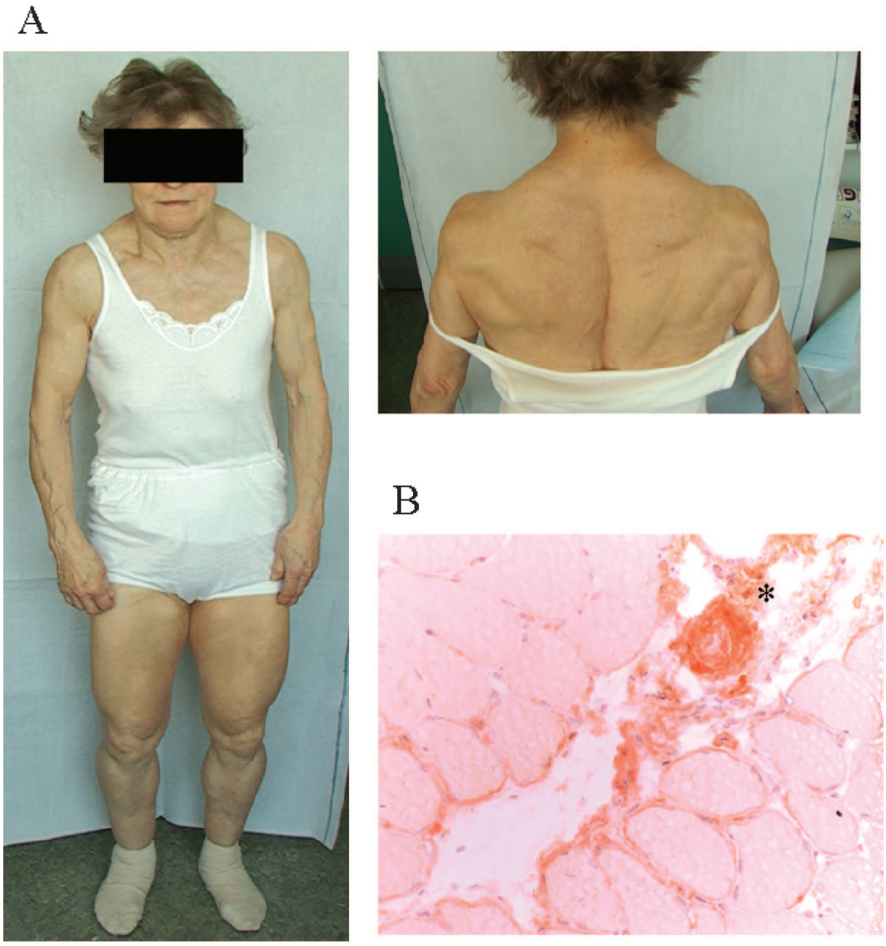

Figure. (A) A body-builder-like appearance of muscles and reduction of subcutaneous fat in a 73-year-old nonexercising woman. (B) Congo red staining of muscle (vastus lateralis) revealed congophilia (red staining) of blood vessel walls (asterisk) and endomysium.

Gross muscle pseudohypertrophy in myeloma-associated light chain amyloidosis

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A 73-year-old woman developed muscle enlargement, stiffness, and signs of congestive heart failure over 2 years (figure, A). Examination revealed proximal weakness and reduction of subcutaneous fat. Macroglossia was absent. Endocrinology was normal-.Muscle biopsy showed amyloid deposition (figure, B), and a plasmacytoma with λ light chain paraprotein was revealed. Melphalan/prednisolone resulted in reduction of muscle bulk; however, death from cardiac failure occurred 12 months later (autopsy not performed).

Amyloid myopathy is a rare manifestation of systemic amyloidosis.[1] Muscle enlargement ("pseudohypertrophy") was reported in 7 to 44% of cases.[2] Amyloid deposition in our patient was not extensive, suggesting that more specific effects of the paraprotein on regulation of muscle homeostasis might explain the unusual phenotype.

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