Submitted by: Kathy L. Newell, M.D., Department of Pathology and Laboratory Medicine, University of Kansas Medical Center, Kansas City, Kansas 66160, and Charles R. Shields, MD, Saint Mary Regional Medical Center, Enid, OK 73701

Diagnosis: Nephrogenic systemic fibrosis (nephrogenic fibrosing dermopathy), with involvement of skeletal muscle

Comment: The left quadriceps muscle showed a similar picture to that of the left biceps, while a biopsy of the left deltoid muscle was relatively normal, with mild type 2 fiber atrophy. CD34 positive cells are present in both skin and involved muscle in this condition. Muscle is thought to be secondarily involved, with skin involvement as the primary manifestation of the fibrosis. The pathogenesis of this condition, which has only been reported since 1997, is thought to be related to either renal failure or dialysis. Dr. Eun-Sook Cho, of New Jersey Medical School, noted that many cases have also had a history of the use of gadolinium as a contrast agent. Dr. Philip Boyer, of UT Southwestern Medical Center, presented an abstract on this condition at the 2005 AANP meeting.

References:

