

IMAGES IN EMERGENCY MEDICINE

Geriatrics



Elderly Woman With Extensor Lag

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1 PATIENT PRESENTATION

A 72-year-old female presented 2 months after experiencing a sudden inability to extend her right third digit, which occurred 3 weeks following a 10-day course of levofloxacin for a urinary tract infection. Physical examination revealed an observable deformity (Fig 1), extensor lag, and loss of extension of the right third digit. Notably, a temporary hold in extension was achievable after passive extension. An ultrasound was performed at the time of presentation (Fig 2).

2 DIAGNOSIS: CLOSED RUPTURE OF THE EXTENSOR DIGITORUM COMMUNIS TENDON

The patient opted for conservative management. Fluoroquinolone-induced tendon rupture is a recognized adverse effect, particularly in elderly patients with chronic kidney disease.¹ Impaired renal clearance increases susceptibility due to prolonged exposure.² Chronic kidney disease-related alterations in collagen synthesis and chronic inflammation contribute to tendon degeneration.^{3,4} Elderly age further increases risk due to natural tendon degeneration and reduced musculotendinous mass and strength.⁵ Prompt medical attention and timely intervention are crucial to prevent chronic tendon instability and reduced hand function.⁶



FIGURE 1. Right hand of the patient demonstrating third-digit extensor lag and extension loss.

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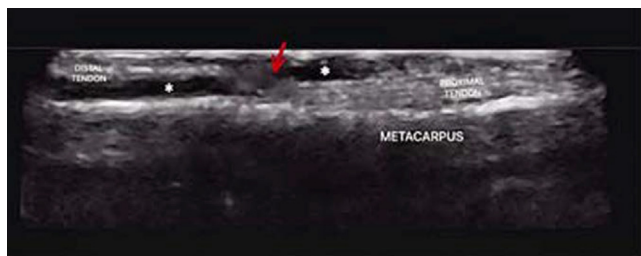



FIGURE 2. Ultrasound image revealing hypoechoic peritendinous edema (*) and a focal hypoechoic area consistent with fibrotic scarring of the extensor digitorum tendon (red arrow).

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