Abstract

Musculoskeletal complications of fluoroquinolones: guidelines and precautions for usage in the athletic population.

Hall MM, Finnoff JT, Smith J.

Abstract

Fluoroquinolone antibiotics are associated with a wide spectrum of musculoskeletal complications that involve not only tendon but also cartilage, bone, and muscle. Insights into the pathoetiology of fluoroquinolone toxicity on musculoskeletal tissues have been evolving over recent years. Although the pathoetiology is certainly multifactorial, alterations in cell signaling proteins and direct toxic effects on musculoskeletal tissues have been strongly implicated. Increasing age and concomitant systemic corticosteroid use appear to significantly increase the risk of adverse events. The purpose of this article is to review the musculoskeletal complications associated with use of fluoroquinolone antibiotics by adults; identify risk factors associated with fluoroquinolone toxicity; explore the possible pathoetiology of fluoroquinolone toxicity on tendon, cartilage, bone, and muscle; and offer recommendations regarding evaluation and treatment of fluoroquinolone-associated musculoskeletal complications. In addition, this review will provide recommendations regarding fluoroquinolone use in athletes and return to play after fluoroquinolone exposure.

Copyright © 2011 American Academy of Physical Medicine and Rehabilitation. Published by Elsevier Inc. All rights reserved.

PMID: 21333952 [PubMed - indexed for MEDLINE]