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## **Musculoskeletal manifestations of cat scratch disease.**

Maman E, Bickels J, Ephros M, Paran D, Comaneshter D, Metzkor-Cotter E, Avidor B, Varon-Graidy M, Wientroub S, Giladi M.

Department of Pediatric Orthopaedics, Dana Children's Hospital.

**BACKGROUND:** Musculoskeletal manifestations (MMs) are considered to be rare in cat scratch disease (CSD) and are not well characterized. We aimed to study MMs of CSD. **METHODS:** A surveillance study performed over 11 years identified patients with CSD on the basis of compatible clinical presentation and confirmatory serological test or PCR results for *Bartonella henselae*. Patients with CSD who had MMs (i.e., myalgia, arthritis, arthralgia, tendinitis, osteomyelitis, and neuralgia) were compared with patients with CSD who did not have MMs (control subjects). **RESULTS:** Of 913 patients with CSD, 96 (10.5%) had MMs. Myalgia (in 53 patients [5.8%]) was often severe, with a median duration of 4 weeks (range, 1-26 weeks). Arthropathy (arthralgia and/or arthritis; in 50 patients [5.5%]) occurred mainly in the medium and large joints and was classified as moderate or severe in 26 patients, with a median duration of 5.5 weeks (range, 1-240 weeks). In 7 patients, symptoms persisted for  $\geq$  1 year; 5 developed chronic disease. Tendinitis, neuralgia, and osteomyelitis occurred in 7, 4, and 2 patients, respectively. Patients with MMs were significantly older than patients in the control group (median age, 31.5 years vs. 15.0 years). In multivariate analysis, age  $>$ 20 years was associated with having any MM (relative risk [RR], 4.96; 95% confidence interval [CI], 2.79-8.8), myalgia (RR, 4.69; 95% CI, 2.22-9.88), and arthropathy (RR, 11.0; 95% CI, 4.3-28.2). Arthropathy was also associated with female sex (RR, 1.89; 95% CI, 1.01-3.52) and erythema nodosum (RR, 4.07; 95% CI, 1.38-12.02). **CONCLUSIONS:** MMs of CSD are more common than previously thought and affect one-tenth of patients with CSD. MMs occur mostly in patients aged  $>$ 20 years and may be severe and prolonged. Osteomyelitis, the most well known MM of CSD is, in fact, the rarest.

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