



## Sausage-like fingers in Crohn's disease

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**Question:** A 65-year-old man presented with pain and swelling of both hands, fever, fatigue, and right hip joint pain for 2 weeks. He had had a 30-year history of ileocolonic CD with four times of bowel surgery. His medication included maintenance infliximab for 10 years, and mesalazine for over 20 years. Physical examination showed a body temperature of 38.6°C. Fingers were swollen like sausage and there was tenderness on the flexor tendons (Fig. A). Paralysis and neurological deficit were not noted. Laboratory tests showed elevated levels of white blood cells ( $10.9 \times 10^3/\mu\text{L}$ ), CRP (10.46 mg/dL; reference range, <0.14 mg/dL), ESR (103 mm/hr; reference range, 2–10

mm/hr), IgG (2,089 mg/dL; reference range, 861–1,747 mg/dL), IgA (644 mg/dL; reference range, 93–393 mg/dL), and IgM (277 mg/dL; reference range, 33–183 mg/dL). Tests for antinuclear antibody, anti-neutrophil cytoplasmic antibody, and anti-cyclic citrullinated peptide antibody were negative. Blood culture was negative. Written informed consent was obtained. What is the most likely diagnosis?

### **Answer to the Images: CD Complicated by Dactylitis and Pelvic Enthesitis**

Physical examination showed dactylitis involving the fingers of both hands (Fig. A). CD complicated by dactylitis and pelvic enthesitis around the right hip joint was diagnosed and treatment with 60 mg/day of prednisolone was initiated. Symptoms and inflammatory parameters improved in several days and then prednisolone was tapered. He has been asymptomatic during 2 years of follow-up with infliximab. Musculoskeletal complication is a common extraintestinal manifestation of CD, classified into axial spondyloarthritis (SpA) and peripheral SpA. Axial SpA includes ankylosing spondylitis and non-radiographic axial SpA, whereas peripheral SpA consists of peripheral arthritis, enthesitis, and dactylitis.<sup>1</sup> Although the immunological mechanisms of “gut-joint” axis have not become clear, it is speculated that both bacterial antigens and reactive T-cell clones, activated into the gut home the joint in associa-



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tion with certain human leukocyte antigen alleles.<sup>1</sup> Dactylitis is caused by flexor tenosynovitis and clinical examination is a sufficient method for its diagnosis.<sup>2</sup> The prevalence of dactylitis is very low with a range under 5% in CD patients.<sup>3</sup> There is a clinical dilemma presented by CD patients with musculoskeletal symptoms is whether the symptoms are caused by CD-associated SpA, unrelated musculoskeletal conditions, or TNF- $\alpha$  inhibitors induced adverse effects,<sup>4</sup> as in this case which the clinical course suggested CD-associated SpA. In conclusion, we should consider SpA carefully in the era of biologic treatments for CD.

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No potential conflict of interest relevant to this article was reported.

### AUTHOR CONTRIBUTION

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