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Opera-Glass Hand in a Patient With Rheumatoid Arthritis

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An 80-year-old woman presented with polyarticular tenderness and swelling that had begun 40 years earlier and been diagnosed as rheumatoid arthritis (RA) and exclusively diagnosed psoriatic arthritis and arthritis induced by other rheumatic diseases. Because of intolerance to chemical disease-modifying anti-rheumatic drugs (cDMARDs) including methotrexate, leflunomide, and hydroxychloroquine, and so on, she had been treated with low dose of corticosteroids and nonsteroidal anti-inflammatory drugs and then etanercept since 2007 until now.

Physical examination revealed that her fingers were significantly shortened, and finger skin was shiny, redundant, and “organ-like” wrinkled, which was consistent with opera-glass hand. There was malfunction of fingers as aberrant lateral activities were performed, and the fingers could be stretched or shortened arbitrarily, like a lorgnette (Fig. A, B). Moreover, fixed flexion deformity of bilateral elbows and lateral deviation of metatarsophalangeal joints were also found. Radiographs showed extensive phalangeal destruction and dissociation (Fig. C). Finally, the laboratory detection indicates that rheumatoid factor and anti-cyclic citrullinated peptide antibody were 203.9 IU/mL and 970 RU/mL, respectively. Medical history indicates that this patient’s deformity gradually progressed since 3 decades ago, even though disease activity was ameliorated after administration of methylprednisolone and celecoxib and supportive treatment.

The opera-glass hand, also known as telescoping fingers or main-en-lorgnette deformity, was first described in a 66-year-old woman with RA with distinctive hands deformities.^{1,2} Besides, these kinds of deformity could be developed in psoriatic arthritis³ and even systemic lupus erythematosus.⁴ As currently accepted, opera-glass hand is late stage of hand bone resorption and dislocation leading to shortening and instability.⁵ Opera-glass hands are extremely rare as early diagnosis and treatment of cDMARDs and biologic DMARDs are needed. However, patients with severe and refractory RA are at high risk of joint deformities resistant to both cDMARDs and biologic DMARDs.

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FIGURE. Color online-figures for A and B are available at <http://www.jclinrheum.com>.

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The authors declare no conflict of interest.

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