EJR European Journal of Rheumatology

DOI: 10.5152/eurjrheum.2018.18062

Images in Rheumatology

Unilateral shortening of third metacarpal bone in a patient with tuberous sclerosis

Ahad Azami, Afshin Habibzadeh

A 33-year-old woman with a history of hypothyroidism and celiac disease presented with symmetric inflammatory polyarthritis. She had no history of seizure. She presented with multiple angiofibroma on the left side of the face and in the back (Figure 1a, b) with bone cysts in phalanxes, which were indicative of tuberous sclerosis with normal neurologic findings. Kidney ultrasonography showed cortical nephrocalcinosis. We observed shortening of the third metacarpal of the left hand during physical examination and radiography (Figure 2a, b). Inflammatory tests showed positive ANA=39.1 IU/mL (using ELISA with normal range <20), CRP: 3+, and ESR: 52. She had no history of hand trauma or surgery. After full evaluations and treatment of arthritis, the patient was discharged symptom free with normal inflammatory markers.

Although different bone manifestations, including bone cysts in the phalanxes of the hands and feet, sclerotic lesions, and periosteal new bone formation (1), are reported for tuberous sclerosis, the shortening of the third metacarpal has not been mentioned. The shortening of MCP may be a part of a syndrome acquired due to a disease during the childhood or idiopathic and is usually reported in pseudohypoparathyroidism (2, 3). In unilateral short MCP cases, we should evaluate the possible childhood injury, osteomyelitis, and infections of epiphysis, which we could not exclude in our case (4). Short third MCP alone has not been reported previously. It is possible for short third MCP to be an incidental finding or another form of presentation in tuberous sclerosis.

ORCID IDs of the authors:
A.A. 0000-0002-3151-6152;
A.H. 0000-0003-2514-5401.

Cite this article as: Azami A, Habibzadeh A. Unilateral shortening of third metacarpal bone in a patient with tuberous sclerosis. Eur J Rheumatol DOI: 10.5152/eurjrheum.2018.18062

Department of Internal Medicine, Ardabil University of Medical Sciences, Ardabil, Iran

Address for Correspondence:
Afshin Habibzadeh, Department of Internal Medicine, Ardabil University of Medical Sciences, Ardabil, Iran

E-mail: afshin.habibzadeh@gmail.com

Submitted: 12 April 2018
Accepted: 16 May 2018
Available Online Date: 08.10.2018

Figure 1. a, b. Multiple angiofibroma on the left side of the face and in the back

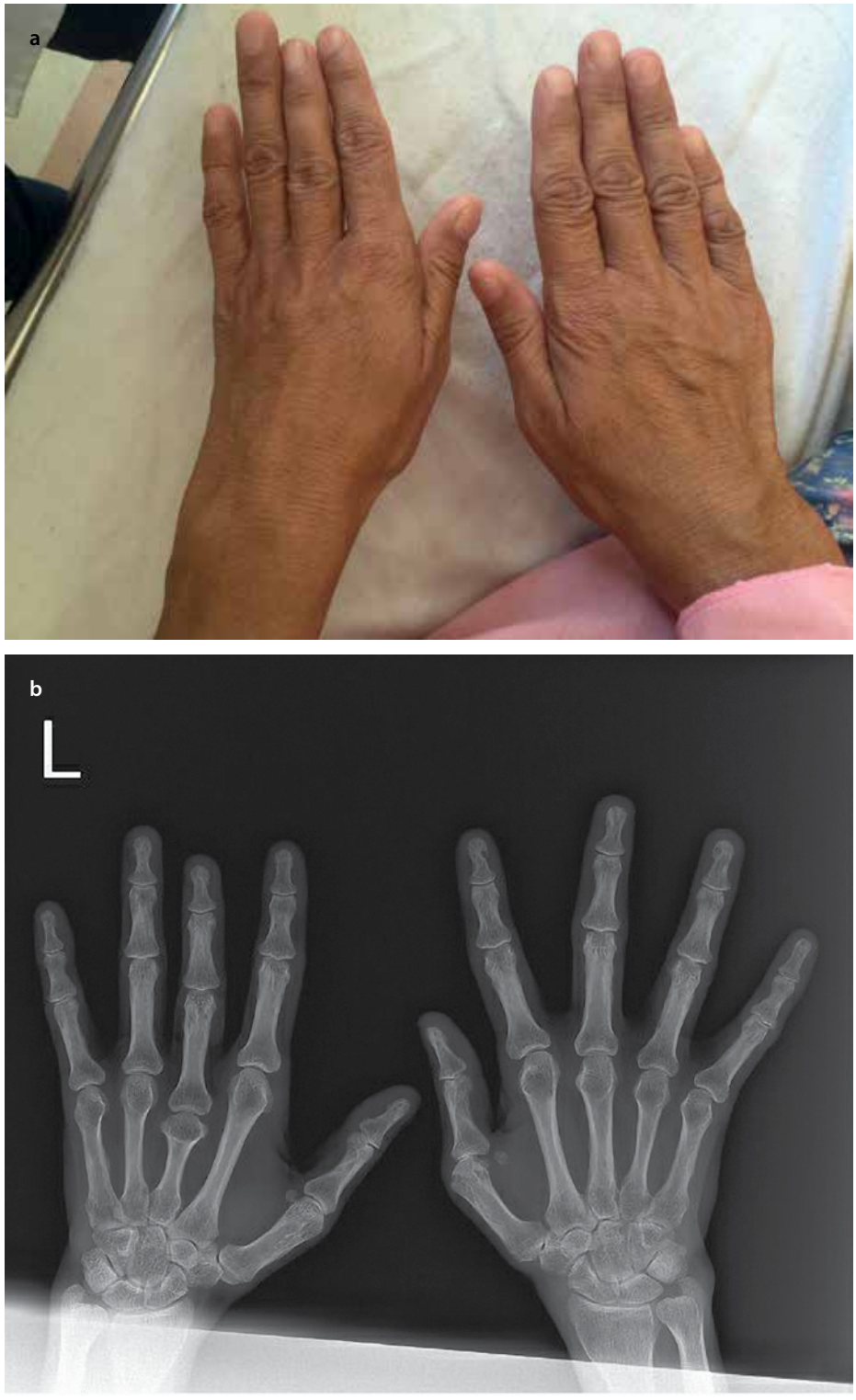

Figure 2. a, b. Third metacarpal of the left hand during physical examination and radiography

Informed Consent: Written informed consent was obtained from the patient who participated in this study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept - A.A.; Design - A.A.; Supervision - A.A.; Materials - A.H.; Data Collection and/or Processing - A.H., A.A.; Analysis and/or Interpretation - A.H.; Literature Search - A.H.; Writing Manuscript - A.H.; Critical Review - A.A.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

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