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Images in Rheumatology

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

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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.

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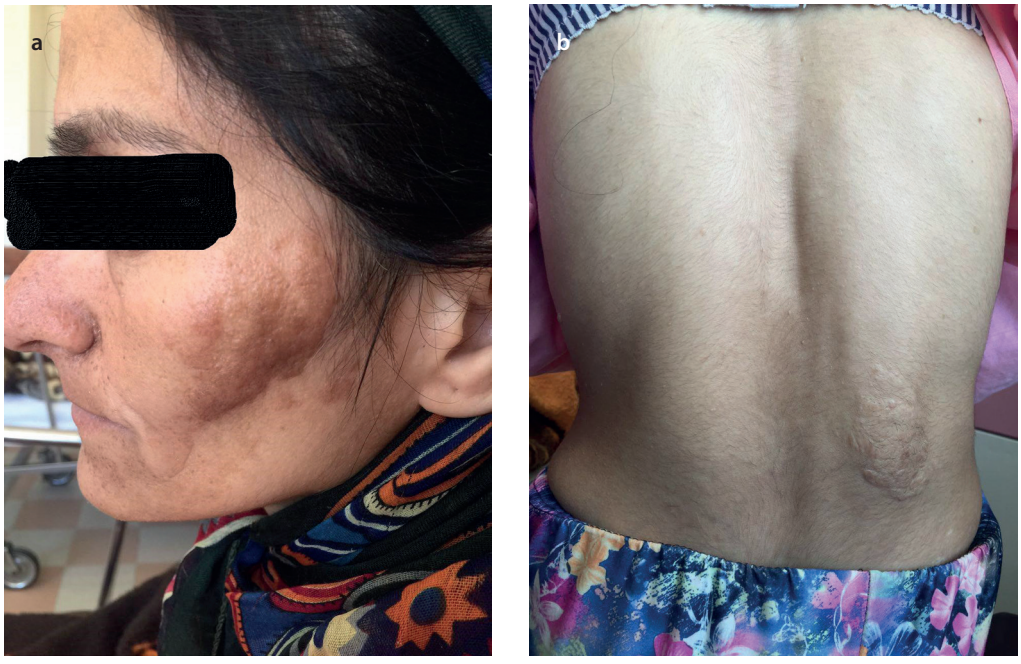

Figure 1. a, b. Multiple angiofibroma on the left side of the face and in the back

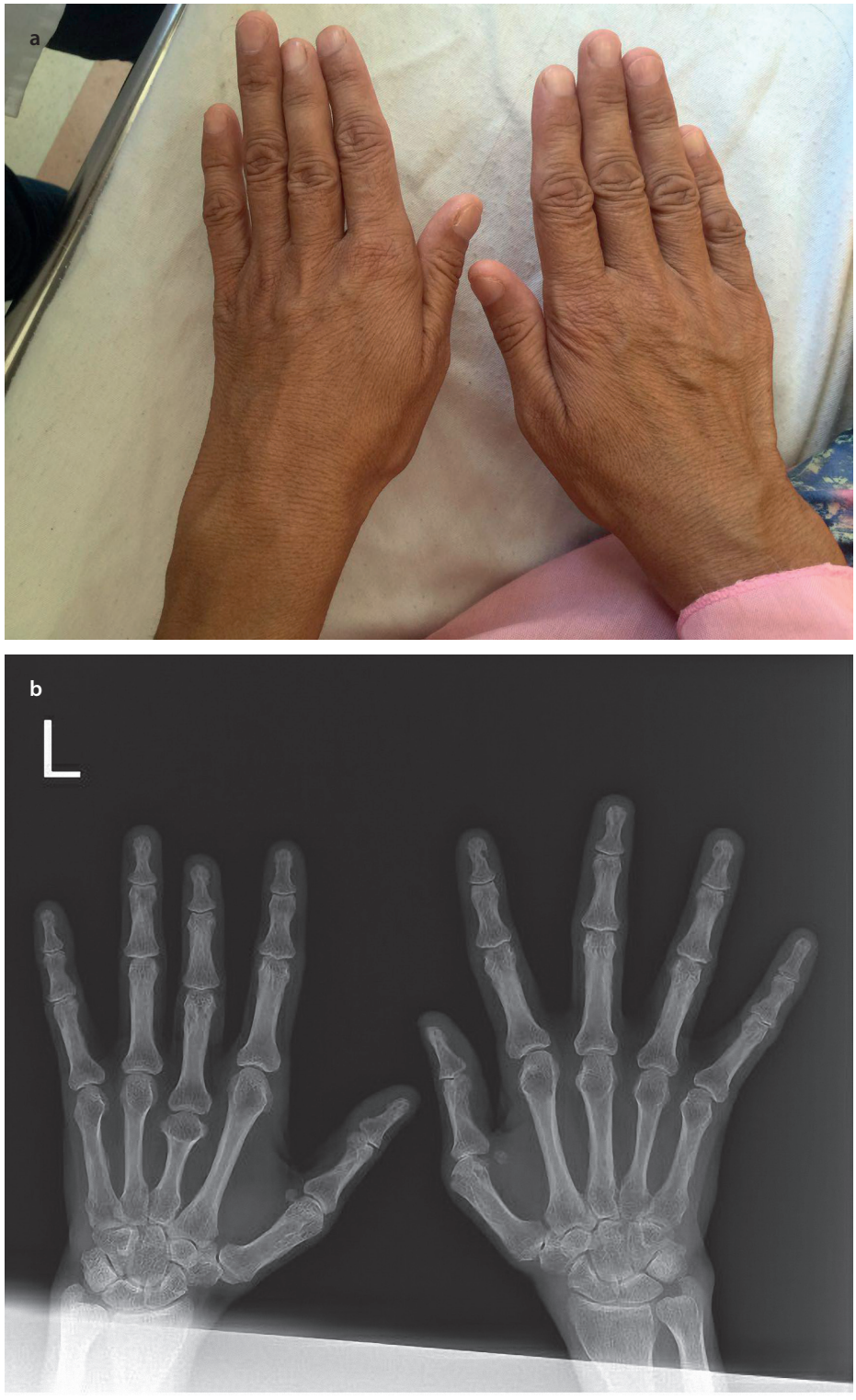

Figure 2. a, b. Third metacarpal of the left hand during physical examination and radiography

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

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References

1. Leung AK, Robson WL. Tuberous sclerosis complex: a review. J Pediatr Health Care 2007; 21: 108-14. [CrossRef]
2. Tzaveas A, Paraskevas G, Gekas C, Vrettakos A, Antoniou K, Spyridakis I. Anatomical variation of co-existence of 4th and 5th short metacarpal bones, sesamoid ossicles and exostoses of ulna and radius in the same hand: a case report. Cases J 2008; 1: 281. [CrossRef]
3. Lodh M, Mukhopadhyay R. A Case of Primary Hypogonadism with Features of Albright's Syndrome. J Reprod Infertil 2016; 17: 188-90.
4. Suresh SS, Abraham R, Ravi P. Isolated symmetrical brachymetacarpia of the thumb-case report. Hand (NY) 2009; 4: 424-6. [CrossRef]