Short Painful Fingers

HISTORY

A 45-year-old female, who is known to have a connective tissue disease, presented to the clinic complaining of pain in all fingers. On physical examination, fingertips were tender and appeared bulbous. There is shortening of all fingers.

- Q1: What are your findings?
- Q2: What are the possible causes?
- Q3: Can it be in a single digit?

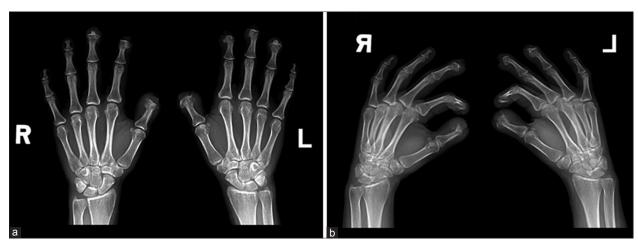


Figure 1: 45-year-old female with connective tissue disease and pain in all fingers

FINDINGS

The AP [Figure 1a] AP and Oblique [Figure 1b] views of the hands demonstrate bilateral terminal tuft resorption.

There is no evidence of erosions seen. No evidence of soft-tissue calcification. No joint destruction is seen.

DIAGNOSIS

Acroosteolysis.

PEARLS AND DISCUSSION

Acroosteolysis is tuft resorption or resorption of the distal phalanges. It can also affect the shaft of the distal phalanx.

When the terminal tuft is resorbed, the differential is usually of scleroderma, psoriasis, thermal injury (if it is cold then it is frostbite, if it is from heat then it is from burns or electricity), dermatomyositis can cause it, as can reactive arthritis and juvenile chronic arthritis.

If it is the mid shaft that is reabsorbed, then toxicity from polyvinyl chloride exposure, hyperparathyroidism (look for brown tumors in that case) or the rare Hajdu-Cheney syndrome.

Single-digit reabsorption can occur in trauma cases, glomus tumor of the digit, or epidermoid inclusion cyst.

Metastasis from bronchogenic cancer can give the cookie bite appearance of the terminal tuft. Osteomyelitis can cause tuft resorption as well.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Nizar A. Al-Nakshabandi

Department of Radiology, College of Medicine, King Saud University, Riyadh, Saudi Arabia

Address for correspondence: Dr. Nizar Abdulaziz Al-Nakshabandi, Department of Radiology, College of Medicine, King Saud University, Riyadh, Saudi Arabia.

E-mail: nizar97@hotmail.com

FURTHER READING

- Miller TT. Bone tumors and tumorlike conditions: Analysis with conventional radiography. Radiology 2008;246:662-74.
- Avouac J, Guerini H, Wipff J, Assous N, Chevrot A, Kahan A, et al. Radiological hand involvement in systemic sclerosis. Ann Rheum Dis 2006;65:1088-92.
- Davies S, editor. Chapman and Nakielny's Aids to Radiological Differential Diagnosis: Expert Consult – Online and Print. 6th ed. Chicago, USA: Saunders Ltd.; 2016.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code:	Website: www.journalmsr.com
	DOI: 10.4103/jmsr.jmsr_76_18

How to cite this article: Al-Nakshabandi NA. Short painful fingers. J Musculoskelet Surg Res 2019;3:315-6.