

Focal Raynaud's phenomenon of the 5th digit related to iPad reading posture

Kathleen A. Touby · George C. Newman

Received: 25 March 2013 / Revised: 5 May 2013 / Accepted: 20 May 2013 / Published online: 14 June 2013
© Clinical Rheumatology 2013

Keywords Raynaud's phenomenon

Raynaud's phenomenon is usually associated with systemic disease or found to be idiopathic, but also can occur in the setting of vascular or nerve compression due to mechanical compression from occupational conditions [1]. While typically involving multiple digits, Raynaud's can occur in a single digit either at the onset of systemic disease or due to local injury. We are not aware of any descriptions, however, of Raynaud's phenomenon isolated to the fifth digit due to use of a tablet-style computer or reader.

The subject was a 59-year-old healthy white female without prior Raynaud's phenomenon or any systemic diseases or known occupational conditions associated with Raynaud's phenomenon. Her only medication was aspirin 81 mg daily. She used an iPad continuously throughout the day for both occupational and recreational activities. Her favored position for reading and game interaction on the iPad used the thumb of the left hand as a vertical stabilizer while the weight of the iPad (1.5 lbs) rested on the radial surface of the fifth digit just proximal to the distal interphalangeal joint (DIP).

One day, without any obvious inciting cause, at an ambient temperature of 61 °F, she had a sudden onset of blue discoloration of the fifth digit of the right hand just proximal to the DIP. The discoloration advanced distally and proximally to the base of the finger. The region distal to the DIP blanched pale white and became numb. Placing the finger in cold water was painful, extended the pallor, and increased the numbness. Five minutes later, placing the finger in warm water for approximately 5 min reversed the pallor and ameliorated the more proximal bluish discoloration. Over the course of the next several days, the episode recurred in a manner virtually identical to the first but each time responded promptly to placing the finger in warm water. Upon cessation of the preferred iPad

reading posture, the episodes ceased spontaneously after 8 days and have not recurred.

This case raises the possibility of a compressive arteriopathy or neuropathy resulting from a particular reading hand posture with the iPad. In the absence of any systemic or other local condition associated with Raynaud's phenomenon, it is possible that this subject's Raynaud's phenomenon was due to local compression by the hard and narrow edge of the iPad (see Figure 1). Casual observation of other subjects using iPad's and other digital tablets reveals that this is a common posture for reading or watching movies. Given the apparent prevalence of this hand posture with digital tablets, additional instances can be anticipated. Awareness of the condition may spare unnecessary evaluations for systemic disease. A change in the handheld posture, use of a padded tablet case or appropriate cushioning should correct the condition.

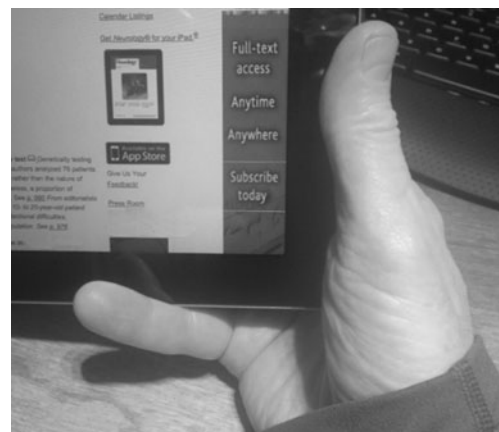


Fig. 1 Typical reading posture of the patient showing the edge of the iPad resting on the medial surface of the middle phalanx of the little finger with potential compression of both the digital artery and nerve

Disclosures None.

Reference

1. Hatron PY, Frimat P, Hachulla E (1998) Raynaud's phenomena of occupational origin. *Rev Prat* 48:1653–1658 (Fr)

K. A. Touby · G. C. Newman (✉)
Neurosensory Sciences, Einstein Medical Center,
5401 Old York Road, Klein 405,
Philadelphia, PA 19141, USA
e-mail: newmang@einstein.edu