

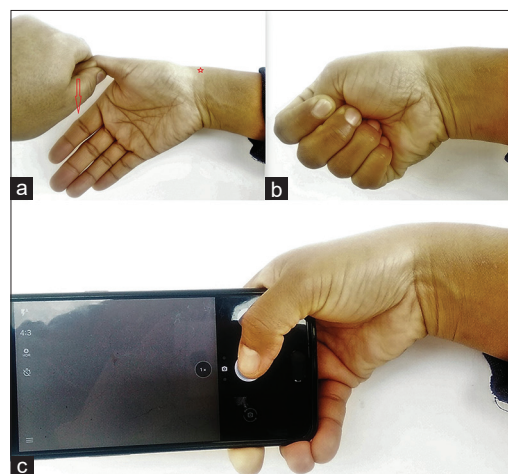
## “Selfie test”: The proposal of a new clinical test for diagnosing De Quervain’s tenosynovitis at primary care level

Dear Editor,

De Quervain’s teno synovitis (DTS) is a common disorder presenting with pain over radial styloid area resulting due to the inflamed tendon sheath of first dorsal compartment tendons viz. abductor pollicislongus (APL) and extensor pollicisbrevis (EPB). Pregnancy, repetitive microtrauma, and anatomical and mechanical factors chiefly contribute to its etiology, and its clinical profile may range from mild to disabling pain affecting the activities of daily living. This disorder, however, requires exclusion of other similar conditions like injury to adjacent musculoskeletal structures, arthropathy, and other tendon disorders. Various clinical tests are described for the diagnosis of DTS and the key of them are Finkelstein test, Eichhoff test, and wrist hyperflexion and abduction of the thumb (WHAT) test. Finkelstein test has been widely used despite concerns of it being wrongly labeled for what essentially is an Eichhoff test. The test, however, has been described to contribute to false positivity and inappropriate diagnosis if done inappropriately.<sup>[1]</sup> In the Eichhoff test, the sudden ulnar deviation of the wrist leads to pain over the radial styloid region more pronounced by the clenched thumb wrapped by flexed fingers<sup>[Figure 1a].</sup><sup>[2]</sup> This method erroneously is widely known as Finkelstein test, whereas the actual Finkelstein test involves grasping the thumb followed by quick abduction of the hand ulnar ward leading to the acute reproduction of the painful symptom<sup>[Figure 1b].</sup><sup>[3]</sup> This actual Finkelstein test in one study has been shown better in diagnosing DTS.<sup>[4]</sup> The WHAT test proposed by Goubau *et al.* was described as a better alternative to the Eichhoff test in diagnosing DTS with a greater sensitivity and improved specificity. The authors also stated that the test also helps to check dynamic instability following surgical decompression cases.<sup>[5]</sup>

Selfie thumb, linked to prolonged exposure of selfie taking posture, is a condition described as repetitive stress injury corresponding to same tendons and present with pain at similar location. We hereby, can derive that the similar posture of selfie taking would aggravate the pain in the cases of DeQuervain’s tenosynovitis. We asked patients with suspected DTS to make a posture of selfie taking and hold the posture

for five seconds to check for the reproduction of pain, and the results were positive <sup>[Figure 1c]</sup>. On closer assessment, this “selfie-posture” actually involves parts of WHAT test as the wrist is hyperflexed coupled with part of Eichhoff test as the ulnarward deviation of the wrist takes place. This “selfie test” or “selfie-posture test” may thus be used to screen or complement the above mentioned clinical tests to diagnose DTS. In three cases we performed this new proposed test and found it to be a good provocative manoeuvre of stretching the affected tendons. The clinical diagnosis of the DTS was also supported by the other three tests, Finkelstein, Eichhoff, and WHAT test being positive. The diagnosis of DTS was confirmed on magnetic resonance imaging (MRI) in two cases. There was dramatic relief from intra-lesional steroid injection as described for the condition, which therefore acts as an adjunct to the diagnosis. A proper study, however, is essential to assess the validity and effectiveness of this proposed test for its acceptance as a routine method. As DTS is a common clinical presentation, an easy and quick clinical test that can be performed by patient itself, is good for screening suspected cases. It shall be useful also for telemedicine and online consultation, and also to screen the patient as real clinical tests cannot be performed. DTS is also commonly seen in females during post pregnancy or child rearing period, and the mass screening of females can be done as the subjects complaining pain during selfie or overhead selfie taking poses with their phones may have an early or established DTS requiring further examination. The easy and identifiable posture like the “selfie-posture” makes this test a good clinical adjunct in the clinically suspected cases.



**Figure 1:** (a) The clinical image of Finkelstein test in which a sudden downward jerk given to the thumb reproduces pain at radial styloid region (marked by star), whereas in Eichhoff test, ulnar ward wrist movement while thumb is clenched within the fingers produces pain at same location (b). The proposed “selfie test” or “selfie posture test” with near similar posture of wrist ulnar ward deviation and thumb adduction producing provocative pain at same location (c)

## Ethical conduct of research

Not applied

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Nil.

## Conflicts of interest

There are no conflicts of interest.

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