



# Smartphone Pinky: Myth or Reality

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## Dear Editor,

The rapid integration of smartphones into daily life has undoubtedly reshaped modern behavior; however, it has also given rise to concerns about potential health consequences. A notable concern, popularized under the term “smartphone pinky”, suggests that prolonged use of smartphones may result in deformities or functional impairments in the little finger (1).

The concept of the “smartphone pinky” emerged from observations of individuals who noted indentations or deviations in their fifth fingers after prolonged use of their smartphones. These reported changes typically involve lateral indentations on the proximal phalanx or altered finger alignment (2). However, scientific literature on the subject remains limited, leaving room for speculation and misinformation.

Anatomically, the fifth digit plays a vital role in maintaining grip stability and hand function. The fifth digit contributes significantly to power grips by coordinating with the ring finger and the hypothenar muscle group. The proximal phalanx of the fifth digit is particularly vulnerable to pressure-induced marks, especially when smartphones are held in a cradled position for extended periods (1-4). However, it is essential to differentiate between temporary, reversible pressure marks and pathological deformities.

Recent studies have indicated a potential link between excessive smartphone use and an increased incidence of musculoskeletal discomfort, particularly in the hands and wrists. Prolonged usage of these devices has been demonstrated to have a negative impact on hand functionality, grip strength, and pinch strength (2,4). This discomfort may stem from inflammation of the tendon

sheath in muscles such as the extensor pollicis brevis and abductor pollicis longus. Furthermore, the pressure exerted on the phalanx of the hand can result in localized pain, a condition known as “smartphone pinky”, which may affect the middle phalanx of the fifth finger, leading to discomfort or impaired dexterity (2).

It is noteworthy that well-established conditions such as De Quervain’s tenosynovitis and carpal tunnel syndrome have stronger evidence linking them to excessive smartphone use compared to any structural deformity, including the “smartphone pinky”. The adaptability of the human hand is such that minor pressure marks or indentations caused by gripping objects are generally transient and not indicative of permanent anatomical changes. Furthermore, factors such as device size, weight, grip strength, and duration of use can significantly influence pressure distribution and the likelihood of discomfort (2,4).

From an ergonomic standpoint, the minimization of repetitive strain and the maintenance of neutral hand positions are foundational principles in the prevention of musculoskeletal injuries. Appropriate device manipulation, uniform distribution of pressure across the hand, and regular rest periods are pivotal in ensuring hand health. Despite its remarkable adaptability, the human hand is susceptible to prolonged exposure to awkward postures, which can lead to the development of musculoskeletal concerns over time (5).

It is recommended that healthcare providers educate patients on the significance of hand ergonomics and the potential risks associated with extended smartphone usage. Encouraging patients to take breaks, adjust their

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grip, and utilize hands-free options can help mitigate the risk of developing recognized musculoskeletal conditions. In treatment, it is imperative to first address the underlying cause. Additionally, the use of braces or splints can be effective in correcting misalignment (2,3,5).

In conclusion, while the concept of “smartphone pinky” reflects a growing concern about the impact of technology on physical health, it appears to be more myth than reality in the current scientific context. Healthcare professionals must prioritize addressing the proven risks of smartphone overuse while advocating for healthy device usage habits. By concentrating on evidence-based ergonomic strategies, we can more effectively preserve hand health in the digital era.

#### Footnotes

#### Authorship Contributions

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