# *Smartphones*: A New Source of Pain in the Wrist and Hand in the 21st Century – Letter Regarding the Study by Gonçalves et al.

## Smartphones: *Uma nova fonte de dor no punho e na mão no século XXI – Carta sobre o estudo de Gonçalves et al.*

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Smartphones have become a part and parcel of the daily existence in our lives due to their multifunctional usefulness apart from normal phone features, which includes internet browsing, electronic mail, location services, camera, as well as third-party applications called "apps", which let the user perform a whole gamut of activities.[1] With this premise, the study by Gonçalves et al.[2] was read and analyzed with interest, and it aimed to investigate the long-term use of smartphones as a risk factor for the development of morbidities in the wrist and fingers. The study concluded that there is a significant correlation between the length of smartphone use and discomfort in the wrist and fingers.

The study included 100 subjects with a history of smartphone use for the past 5 years. Considering the prevalence of smartphone use, which is reported to be of approximately 79% of the population in the age group between 18 and 44 years, an adequate sample size in a prospective study like this may have yielded more interesting results with greater validity.[3]

The study used the Boston Carpal Tunnel Questionnaire (BCTQ) to assess the symptoms as well as the functional deficit in the included subjects. This patient-reported outcome measure (PROM) has been criticized since its functional scale does not cover activities related to computers or smartphones.[4] Since the study in question deals with the effects of smartphone use, the application of the BCTQ may have been inappropriate. The use of other validated tools, such as the Modified BCTQ, which contains two additional items related to electronic gadgets and driving, would have provided more valid results.

Studies with an adequate sample size calculated prospectively based on the prevalence rate of smartphone use along with the use of a PROM which encompasses the items related to smartphone use shall help us more in understanding the role of smartphones in the development of pain in the upper limb.

### Conflict of Interests

The authors have no conflict of interests to declare.

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