## Clinical Note: How I Examine My Patient

# The Shaking Shoelace

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It is good practice to physically examine patients while being undressed. Here, we illustrate that observation of clothes in dressed patients can occasionally also yield valuable information.

A 59-year-old man with Parkinson's reported a subjective tremor. Yet, neurological examination showed no tremor while observing the bare extremities (video section A, showing no discernible tremor in the bare feet). However, while wearing shoes, a subtle tremor was revealed by rhythmic oscillations of the left shoelace (video B), which presumably acted as a lever, much like the mechanisms used for earthquake detection. Power spectrum analysis of the video showed no discernible tremor in the bare feet, but examination of the oscillations of the left shoelace revealed a distinct tremor (peak frequency of 3.45 Hz) compatible with Parkinson's disease (video C).

This underscores that observing patients while still dressed may occasionally be needed to bring out the full repertoire of key physical signs.

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### CONFLICT OF INTEREST

BRB, RH, and BvdW report no disclosures.



Video section A.

Author contributions

BB and TT: collecting video data and drafting the manuscript

RH: expert opinion and revising the manuscript BvdW: arranging tremor quantification and revising the manuscript

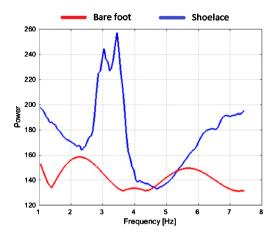
#### SUPPLEMENTARY MATERIAL

The supplementary material is available in the electronic version of this article: http://dx.doi.org/10.3233/JPD-181541.

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Video section C.