A microscope for subtle movements in clinical neurology

Discerning subtle abnormal movements is often critical in making the correct neurologic diagnosis. However, many telltale movements are hardly visible to the nonspecialist's eye. Using Eulerian video magnification (EVM), which applies a spatial and temporal filtering algorithm to amplify movements digitally on (real-time) video,[1] we present 3 neurologic patients in whom the diagnosis became obvious after video magnification (video on the *Neurology*® Web site at Neurology.org): idiopathic Parkinson disease, with a subtle asymmetric resting hand tremor; orthostatic tremor of the legs; and an inconspicuous generalized epileptic seizure. These cases suggest that EVM could be employed as a "microscope" for assessing or monitoring subtle abnormal movements.

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Supplemental data at Neurology.org

1. Eulerian. Video magnification. Available at: http://people.csail.mit.edu/mrub/vidmag/. Accessed April 10, 2015.

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