Value of self-induced plantar reflex in distinguishing Babinski from withdrawal

Interpretation of the plantar response can be difficult, resulting in inter- and intraobserver discordance. A common source of confusion is that tickle-induced withdrawal can cause dorsiflexion of the great toe in a pattern similar to the Babinski sign. 

Ticklish sensation, present when the stimulus is introduced by a person other than the subject, is reduced by self-stimulation. The cause of this inhibition has been shown to be in the cerebellum.1 

We reasoned that self-induction of the plantar response should reduce withdrawal, obviating the potential confusion with a Babinski sign. The patient would sit down, grab the foot, and scratch the sole with a sharp object in a posture similar to the famous Greco-Roman Spinario sculpture of a boy withdrawing a thorn from the sole of his foot, studied and drafted by Peter Paul Rubens (1577–1640) (figure). 

In the process of reviewing the available literature, we were surprised to discover that C. Miller Fisher2 had reported this observation 4 decades ago.

See the video on the Neurology® Web site at Neurology.org.

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Author contributions: Dr. Sohrab: study concept and design, acquisition of data, analysis and interpretation. Dr. Gelb: study concept and design, acquisition of data, analysis and interpretation.

Study funding: No targeted funding reported.

Disclosure: Dr. Sohrab reports no disclosures. Dr. Gelb has received royalties from Oxford University Press and honoraria from the AAN (for Continuum®), from UpToDate, and from MedLink (all for chapters he wrote). Go to Neurology.org for full disclosures.

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Neurology 2016;86;977
DOI 10.1212/WNL.0000000000002454

This information is current as of March 7, 2016

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