

# High-res US: First-line imaging choice for the evaluation of patients with foot drop?

May 6 2010

---

High resolution ultrasound should be the imaging test of choice when evaluating patients with foot drop (an inability or difficulty in moving the ankle and toes causing uncontrolled slapping of the foot while taking a step), according to a study to be presented at the ARRS 2010 Annual Meeting in San Diego, CA. Ultrasound imaging is non-invasive and involves exposing part of the body to high-frequency ultrasound waves to produce pictures of inside the body.

Foot drop is usually caused by peroneal [neuropathy](#) which is the most common compression neuropathy (damage to a single nerve or nerve group) of the lower extremity. "Electromyography (EMG) and [magnetic resonance imaging](#) (MRI) are commonly used to evaluate the peroneal nerve in patients with foot drop, however, they are not always effective,' said Tom Grant, DO, lead author of the study.

The study, performed at the Feinberg School of Medicine, Northwestern University, in Chicago, IL, included 15 patients with foot drop who were evaluated using high resolution ultrasound. "Ultrasound was found to be highly effective for the characterization of the common peroneal nerve, including intrinsic and extrinsic causes of peroneal neuropathy," said Grant. All patients evaluated were found to have peroneal neuropathy.

"Ultrasound is less expensive than EMG and MRI, it is painless, and as our study suggests, is highly effective for the evaluation of patients with foot drop," he said.

"Ultrasound should be considered as a first test in the evaluation of patients with foot drop. If the ultrasound is normal, then EMG and MRI should be performed," said Grant.

Provided by American College of Radiology

Citation: High-res US: First-line imaging choice for the evaluation of patients with foot drop? (2010, May 6) retrieved 25 April 2024 from <https://medicalxpress.com/news/2010-05-high-res-first-line-imaging-choice-patients.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.