Vetting information on
PERIPHERAL NEUROPATHY

Assessing neuropathy-related claims for scientific and medical accuracy

Peripheral neuropathy is challenging to diagnose and treat. This leaves patients vulnerable to false claims about miracle cures or other pseudoscientific (falsely or mistakenly claimed, or not regarded as being based on scientific method) information that may be seen on social media, in advertising or via poorly vetted news outlets.

Determine if a claim is reliable and accurate by looking for common red flags, using critical thinking skills and understanding frequent characteristics of pseudoscience.

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CHARACTERISTICS OF PSEUDOSCIENCE*

1. Is unfalsifiable (can't be proven wrong)
2. Relies heavily on anecdotes, personal experience and testimonials
3. Cherry picks confirming evidence while ignoring/minimizing disconfirming evidence
4. Uses technobabble, words that sound scientific but don't make sense
5. Lacks plausible mechanism, no way to explain it based on existing knowledge
6. Is unchanging, doesn't self correct or make progress
7. Makes extraordinary or exaggerated claims with little evidence
8. Professes certainty, talking of 'proof' with great certainty
9. Commits logical fallacies, arguments contain errors in reasoning
10. Lacks peer review, goes directly to the public, avoiding scientific scrutiny
11. Claims there is a conspiracy to suppress their ideas

CRITICAL THINKERS*

» Are aware their thinking is flawed

» Think about how they think

» Are curious and inquisitive

» Separate their identity from their beliefs

» Welcome criticism from others

» Use evidence to arrive at conclusions and maintain a healthy level of skepticism

» Avoid black and white thinking and are comfortable with ambiguity and uncertainty

» Are humble

VET SOURCES FOR ACCURACY

Sites ending in .com (vs .org, .edu or .gov) need more scrutiny. Are they trying to sell a product? How do they validate their claims? Peer-reviewed research in respected journals is best – but even then, science and medicine constantly evolve as new and better information are available.

Employ the critical thinking skill of skepticism: learn more about the website or organization. Do some research. Who are the people behind the claims? What is their motivation? Are there any reports of fraud or conflicting evidence?

COMMON RED FLAGS

1. **Stories instead of proof:** claims are often based on personal stories from a few people or on studies that weren't done well or were too small to be trustworthy.
2. **Emotional tricks:** claims try to make you feel emotional or desperate, saying that big companies or doctors ignore treatments that are natural or cheap. In reality, doctors and scientists want to find good treatments no matter where they come from or how much they cost.
3. **Confusing language:** ads use complicated medical words or explanations that can't be checked with reliable sources.
4. **Hidden truths:** claims say there is a "secret" truth about your illness that doctors are hiding from you. In reality, medical science is excited to share new findings.
5. **Asking for money:** site/post/ad often asks for money as a big part of its message.

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RESOURCES FOR VETTING ACCURACY

» FTC scam reporting: FTC.gov

» Quack Watch: QuackWatch.org

» US Clinical Trials Registry: ClinicalTrials.gov

» US FDA approved treatments: FDA.gov