

Pain Treatment Center
Dept. of Anesthesiology & Perioperative Medicine
University of Rochester Medical Center
601 Elmwood Ave, Box 604
Rochester, NY 14642
Tel: 585-276-3252
Fax: 585-276-0144
E-mail: Adam_Carinci@urmc.rochester.edu

Adam J. Carinci, MD, JD, MBA
Chief, Division of Pain Medicine
Director, Pain Treatment Center
Associate Professor

CRPS: Diagnostic Certainty vs. Legal Proof

A concise, litigation-focused overview explaining why clinical diagnosis does not automatically establish causation, permanence, or disability.

Introduction

Complex Regional Pain Syndrome (CRPS) occupies a difficult intersection between clinical medicine and the legal system. Within medicine, CRPS is a recognized chronic pain condition diagnosed through clinical criteria and longitudinal observation. In litigation, however, the presence of a medical diagnosis alone is insufficient. Courts are tasked not with confirming a diagnosis, but with evaluating whether the **evidence reliably supports causation, severity, permanence, and functional impairment**.

This distinction—between diagnostic certainty and legal proof—lies at the core of why CRPS cases are frequently disputed. This article examines how courts evaluate CRPS claims, why clinically valid diagnoses often fail to satisfy legal standards, and how expert testimony can responsibly bridge this divide.

I. CRPS as a Clinical Diagnosis

CRPS is diagnosed clinically, most commonly using the Budapest Criteria, which require the presence of disproportionate pain, symptoms across multiple domains (sensory, vasomotor, sudomotor/edema, and motor/trophic), and the exclusion of alternative diagnoses. Importantly, no laboratory test or imaging study confirms CRPS with certainty.

In clinical practice, this diagnostic framework is acceptable and widely used. Physicians are trained to make reasonable diagnostic judgments in the face of incomplete data, particularly for conditions defined by symptom clusters rather than biomarkers. Legal proceedings, however, impose a different standard.

II. Why Diagnostic Certainty Does Not Equal Legal Proof

Courts are not bound by clinical conventions. A diagnosis that is reasonable for treatment purposes may still fail to meet evidentiary thresholds required for admissibility or persuasion. Legal proof demands transparency in methodology, reproducibility of reasoning, and explicit attention to alternative explanations.

Judges and juries evaluate whether an expert can explain:

- **How** the diagnosis was reached
- **Why** competing diagnoses were excluded
- **Whether** the diagnostic criteria were applied consistently over time

Without this forensic clarity, a CRPS diagnosis—however genuine—may be accorded limited weight.

III. The Role of Causation in CRPS Litigation

Causation is often the most significant gap between diagnosis and legal proof. Clinicians may reasonably conclude that CRPS followed an injury based on temporal association and clinical course. Courts, however, require more than sequence; they require explanation.

A legally sufficient causation opinion addresses:

- Biological plausibility
- Alternative etiologies (including pre-existing pain conditions)
- The nature and severity of the alleged inciting event
- Whether the condition represents causation, aggravation, or coincidence

Failure to articulate this reasoning exposes CRPS claims to challenge under Daubert or similar standards.

IV. Objective Evidence and Its Forensic Value

Although CRPS is not diagnosed by objective testing alone, courts consistently favor corroborative findings. Objective or semi-objective evidence strengthens legal proof by demonstrating consistency and reducing reliance on subjective complaint.

Such evidence may include:

- Persistent autonomic asymmetry
- Trophic changes documented over time
- Consistent physical examination findings
- Imaging or thermographic abnormalities when present

The absence of objective findings does not preclude CRPS, but it heightens the need for careful longitudinal documentation and cautious expert conclusions.

V. Functional Impairment and Permanence

Another critical distinction between medical and legal analysis involves functional impairment. In medicine, diagnosis and treatment may proceed independently of formal disability assessment. In litigation, however, courts require proof of **functional limitation and permanence**, not merely diagnosis.

Experts must distinguish:

- Symptoms from functional impact
- Temporary impairment from permanent disability
- Treatment needs from work restrictions

Overstatement in this domain frequently undermines otherwise valid CRPS claims.

VI. The Expert's Role: Explanation, Not Advocacy

Expert testimony is the linchpin of CRPS litigation. Courts expect experts to function as educators, not advocates. Opinions that acknowledge uncertainty, explain limitations, and avoid absolutist conclusions are generally more persuasive than those that overreach.

A credible CRPS expert:

- Separates clinical diagnosis from legal conclusions
- Explains methodology clearly
- Addresses weaknesses candidly
- Grounds opinions in peer-reviewed literature

This approach enhances admissibility and credibility across jurisdictions.

VII. Implications for Plaintiff and Defense Counsel

For plaintiff counsel, success in CRPS litigation depends on aligning medical opinions with legal standards, not merely presenting a diagnosis. Careful expert selection and disciplined evidentiary development are essential.

For defense counsel, effective challenge focuses on methodological gaps, unsupported causation opinions, and overstatement—rather than wholesale rejection of CRPS as a legitimate condition.

Conclusion

CRPS highlights the tension between clinical reasoning and legal proof. A diagnosis that is medically reasonable may still fail in court if it is not supported by transparent methodology, sound causation analysis, and credible functional assessment. When expert testimony acknowledges this distinction and bridges it thoughtfully, CRPS claims are far more likely to withstand judicial scrutiny.

References

1. Harden RN, et al. *Proposed new diagnostic criteria for complex regional pain syndrome*. Pain. 2007.
2. Bruehl S. *Complex regional pain syndrome*. BMJ. 2015.
3. Goebel A, et al. *Complex regional pain syndrome in adults*. Lancet. 2019.
4. Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).
5. AMA Guides to the Evaluation of Permanent Impairment, 6th ed.

Dr. Adam J. Carinci, MD, JD, MBA is a nationally recognized CRPS thought leader and leading expert witness with over fifteen years of pain medicine experience. With dual training as both a physician and a lawyer, Dr. Carinci is a sought-after expert witness in complex medico-legal matters on a national stage, bringing distinct acumen at the intersection of medicine and law. He is double board-certified in Anesthesiology and Pain Medicine and maintains an active, full-time clinical practice. Dr. Carinci is Chief of Pain Management and Director of the Interventional Spine and Pain Treatment Center at the University of Rochester Medical Center and an Associate Professor at the University of Rochester School of Medicine.