

What Medical Evidence Can and Cannot Establish in Personal Injury Litigation

Primary Research Jurisdiction: United States of America

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Why this matters

When imaging shows degenerative disc disease, arthritis, prior injuries, or abnormal findings that clearly predate the incident, medical evidence often cannot cleanly separate: (a) what existed before, (b) what the incident changed, and (c) what symptoms would have emerged anyway through natural progression. Litigation risk commonly turns on whether experts overstate what medicine can prove about timing, acceleration, and “lit up” causation—and whether the record contains the few elements that make aggravation opinions defensible under scrutiny.

What the evidence can reliably support

- Asymptomatic degenerative findings are common. Imaging abnormalities frequently exist in people with no symptoms; post-incident imaging often discovers “pathology” that may be unrelated to the incident.
- Standard imaging is weak at timestamping. MRI/CT/X-ray generally show anatomy on the scan date; they rarely establish when a disc herniation/degenerative change occurred.
- Aggravation theories are strongest when there is objective evidence of *new* injury (acute findings, early imaging, inflammatory signs, or clear new structural change) that anatomically matches the mechanism and symptoms.
- Clinical correlation matters more than the image alone. Imaging becomes more persuasive when it matches exam findings (neurologic deficits, dermatomal patterns, consistent functional change) documented early and consistently.

Where claims are most vulnerable

- “Acceleration” opinions (“this trauma sped up degeneration”) often outrun the science without pre-incident baselines and strong comparative reasoning.

- Timing by imaging appearance is commonly overstated; population-level correlations are frequently treated as patient-specific proof.
- Temporal proximity (“pain started after the crash”) supports an inference but doesn’t prove causation; recall bias and coincidental flare-ups are real and routine.
- Narrative momentum in medical records can create “attribution cascades” where later providers repeat an accident-related causal story that originated as an early impression, not independently verified evidence.

Quick screening checklist

Stronger posture (more defensible)

- Contemporaneous documentation: symptoms recorded immediately or near-immediately after the incident
- Early imaging showing a plausible *new* change (or acute inflammatory markers/edema) at the relevant level
- Objective correlates: measurable neuro deficits or reproducible exam findings matching the imaging
- Consistency: symptom narrative stable across providers with minimal gaps
- Differential diagnosis that actually addresses natural progression rather than dismissing degeneration conclusorily
- Treatment course proportional to injury type (and consistent with expected recovery patterns)

Weaker posture (higher challenge exposure)

- Delayed treatment or major gaps between incident and first documented complaint
- Imaging obtained late with degenerative findings but no clear acute component
- No objective findings beyond pain reports and non-specific ROM limitation
- Inconsistent reporting across providers or evidence of selective documentation
- Expert leaps from “abnormality exists” → “therefore trauma caused it” without bridging analysis

Practical implication

If the record is dominated by degeneration + delayed documentation + weak objective correlates, causation opinions tend to become inference-heavy and therefore easier to

attack under modern reliability scrutiny. If the record contains early documentation + anatomically coherent findings + a credible explanation for why natural progression alone is insufficient, aggravation theories are materially more defensible. The critical question is rarely “is degeneration present?”—it is whether the record contains the *few* elements that let an expert separate trauma effect from baseline pathology without overclaiming.

What the rest of the brief provides

The rest of this brief maps the domain in detail and provides:

- A structured separation of established vs contested medical propositions
- A litigation-calibrated taxonomy of methodological vulnerabilities (baseline absence, temporal inference, confounding-by-indication, attribution cascades, surrogate endpoints, selective citation, biomechanical assumption failures)
- Concrete “how to evaluate this” guidance for imaging, symptom timelines, exam findings, treatment response, and documentation quality
- A “Recent Developments” section to prevent reliance on outdated evidentiary assumptions

Professional use: background research for professional evaluation; not legal advice or expert testimony.

Download the full reference brief (PDF) if you want the complete seven-section map: the specific evidentiary fault lines, the methodological vulnerability checklist in full, and the “what to look for in the record” framework that sits behind the summary points above. The value is not more pages. It is seeing the structure laid out end-to-end so you can test an aggravation theory against the actual limits of medical inference.

If you have an active matter, I also produce case-specific versions of this work. The structure stays the same; the analysis narrows to the record: pre-incident history, imaging chronology, treating documentation, symptom timeline, and the precise question you need answered. Delivered as a fixed-scope Focused Litigation Issue Brief.

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