DOES LITIGATION INFLUENCE THE OUTCOMES OF SURGERY IN THE WORKERS COMPENSATION ARENA?

No conflicts of interest

Jayantilal Govind

MBChB (Cape Town). DPH. M.Med (Syd) F.A.FOEM

Director & Senior Staff Specialist
Occupational and Pain Medicine

ACT Health @ The Canberra Hospital
Canberra
“Back pain is an illness in search of a disease”

Low back pain is to workers’ compensation, 

As neck pain is to the auto insurance industry.

W.O. Spitzer

For occupational back injury, “…the evidence that such injuries actually exist is slight or often non-existent”

Compensation Neurosis

Accident Neurosis

The Prevailing Notion / Expectations

Irrespective of treatment
Irrespective of treatment
Reasons proffered include

- secondary gain,
- the pursuit of financial gain,
- psychological disturbances,
  or
- are symptom magnifiers.

The evidence however is

- sparse
- inconsistent,
- ambiguous, and,
- confounded by a large number of
  unaccounted variables, such as...
Confounded by:

incorrect diagnosis,
inappropriate treatment and iatrogenesis
complications of treatment
stress of litigation
mistrust by medical personnel

financial strain
severity of injury
bias in reporting
physician bias
outcome expectations

2,278 publications
Only 4 that were randomised
None were blinded.

Most studies - considerable heterogeneity (p. <.001)

Major confounders:
- publication bias
- selection bias
- differences in disease severity

Likely that the negative effects of litigation may have been over represented in observational studies.

Studies showing no difference between compensated and non-compensated patients

- Brachial plexus lesion (8) (1997)
- Carpel tunnel decompression (7) (1999)
- Anterior cervical fusion (10) (2002)
- Ulnar nerve transposition (6) (2002)
Does Workers’ Compensation influence recovery rates?

A critical review of the literature
Findings:

- Negative attitudes and biases of health professionals
- Lack of knowledge or commitment to injury management
  - Secondary gains of service providers
  - Abnormal treatment behaviour
- Complex paper work delaying treatment
  - Unavailability of suitable duties
  - Disillusionment with system

The influence of legislation on outcomes
- Suspicion and dissatisfaction with service providers
- Poor outcomes associated with prolonged exposure to non-proven treatment
- Limitation in methodology and data analysis
- The effect of legal representation and litigation are contradictory and equivocal

Lack of consistent standard criteria between studies
- No controlled studies
Legal Aspects

- Perceived advice to follow treatment plans
- Stressful/uncertain/lengthy process
  - The skill of the lawyer
  - The skill of the claimant as a witness and
    - not the severity of the injury
- Judges who hold different views on work injuries

Does the nature of treatment generate ........

- Positive
  or
- Negative outcome

.....irrespective of litigation?

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>WCC</th>
<th>Non-WCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIF</td>
<td>151</td>
<td>106</td>
<td>45</td>
</tr>
<tr>
<td>Psych Disturbance</td>
<td>51</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Fusion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single level</td>
<td>87</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Multi-level</td>
<td>64</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>30</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Complications</td>
<td>30</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Patients with complications</td>
<td>26</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Additional surgery</td>
<td>24</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Failed fusion</td>
<td>30%</td>
<td>38%</td>
<td>11%</td>
</tr>
</tbody>
</table>
Hodges SD, Craig-Humphreys S, Eck JC, Covington LA, Harrom H. Predicting factors of successful recovery from lumbar spine surgery among workers’ compensation patients. JAOA 2001;101:78-83

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>Microdisc</th>
<th>Fusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operated</td>
<td>87</td>
<td>37</td>
<td>36</td>
</tr>
<tr>
<td>Follow up</td>
<td>73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oswestry</td>
<td></td>
<td>↑↑</td>
<td>↑</td>
</tr>
<tr>
<td>VAS</td>
<td></td>
<td>↓↓</td>
<td>↓</td>
</tr>
<tr>
<td>Return to work</td>
<td></td>
<td>72%</td>
<td>43%</td>
</tr>
</tbody>
</table>

SF-36

- Physical Functioning   ↓   ↓↓
- Bodily pain            ↓   ↓↓
- Mental health          ↓   ↓↓

(p=<05)
Comparative analysis of insured and non-insured patients undergoing IDETA for IDD

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>WCC</th>
<th>Non-WCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inception cohort</td>
<td>34</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>Follow-up</td>
<td>32</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Discograms:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ve single level</td>
<td>24</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>+ve 2 level</td>
<td>10</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

Ref: Mekhail et al; Pain Pract 2004; 4: 84-90

<table>
<thead>
<tr>
<th>WCC</th>
<th>Non-WCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Relief</td>
<td>Pain Relief</td>
</tr>
<tr>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>50-100%</td>
<td>50-100%</td>
</tr>
<tr>
<td>&lt;50%</td>
<td>&lt;50%</td>
</tr>
</tbody>
</table>

Number 4 5 8 3 7 8
Working 4 5 4 3 7 4
Opioids 0 0 5 0 1 6
Success 9 10
Failure 8 8
Fusion 2 2

Karasek M, Bogduk N. Twelve-month follow-up of a controlled trial of intradiscal thermal anuloplasty for back pain due to internal disc disruption. Spine 2000; 25:2601-2607
Chronic neck pain

WHIPS - Whiplash Protection System

Engineering Design & Safety

Insurance Institute for Highway Safety
Nerve blocks

- Identifies the nerve that mediates the pain
- Infers the anatomical source of pain
- Knowledge of neural pathways
### CERVICAL RF NEUROTOMY

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Litigants</th>
<th>Non-Litigants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>32</td>
<td>18</td>
</tr>
<tr>
<td>Followed</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>VAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-RF</td>
<td>8.1</td>
<td>8.4</td>
</tr>
<tr>
<td>12 months</td>
<td>4.0</td>
<td>2.9</td>
</tr>
<tr>
<td>VAS = 0</td>
<td>50%</td>
<td>61%</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>97%</td>
<td>100%</td>
</tr>
<tr>
<td>Opioids</td>
<td>-52%</td>
<td>-50%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Status</th>
<th>N</th>
<th>Success (complete relief)</th>
<th>Failure</th>
<th>Duration of Relief (interquartile range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litigation</td>
<td>14</td>
<td>9</td>
<td>5</td>
<td>500 (250 - 779)</td>
</tr>
<tr>
<td>No Litigation</td>
<td>14</td>
<td>10</td>
<td>4</td>
<td>735 (632 – 1,125)</td>
</tr>
</tbody>
</table>

P 0.686 0.1771

<table>
<thead>
<tr>
<th>Status</th>
<th>N</th>
<th>Success (complete relief)</th>
<th>Failure</th>
<th>Duration of Relief median days (interquartile range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litigation</td>
<td>33</td>
<td>28</td>
<td>5</td>
<td>249 (94-312)</td>
</tr>
<tr>
<td>No Litigation</td>
<td>16</td>
<td>15</td>
<td>1</td>
<td>297 (127-363)</td>
</tr>
<tr>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td>0.373</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.299</td>
</tr>
</tbody>
</table>


Irrespective of litigation

- Positive outcomes are achievable
- 3 independent and unrelated studies show that
- Litigation makes no difference when proven z joint pain is treated with RFN
Irrespective of litigation, treatment works worse.

Despite treatment, no fusion.

Despite litigation, treatment works.

Despite treatment, no fusion.

Despite litigation, fusion.
Conclusion

Observational studies have a tendency to over-represent negative outcomes
Observational studies have a tendency to over-represent negative outcomes

Qualitatively, studies are confounded by multiple variables including bias, lack of comparative data and iatrogenesis

There are no controlled studies to validate the prevailing view that litigation promotes negative outcomes
Correct treatment
Correct patient
Better outcomes
Irrespective of
Litigation.