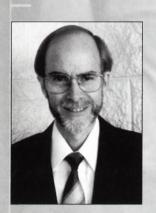
## Medicolegal reporting for spinal injuries

Why are some patients given a zero disability when they have clearly defined pathology?



**Dr Lynton Giles** is the Director of the National Unit for Multidisciplinary Studies of Spinal Pain, The University of Queensland, Townsville General Hospital, Townsville, Queensland. **PHONE** 07 477 I 2098 **EMAIL** Igiles@ultra.net.au

he opinions expressed by medical practitioners in medico-legal reports significantly affect a plaintiff's compensation or common law entitlements. Fairness and decency requires that medical practitioners who are asked to provide medico-legal reports do so after:

- Taking care to obtain from the plaintiff, and accurately recording, a comprehensive history as to how the injury was sustained and how it affects the plaintiff;
- Assessing whether the plaintiff is genuine;
- Ensuring that appropriate imaging has been undertaken and ensuring imaging reports are accurate;
- Carefully and fairly interpreting imaging reports; and
- Carefully and fairly applying any disability tables or impairment codes.

"Clients sent for a medicolegal opinion sho thoroughly investigated not only for medicolegal also because a spinal injury can re and chronic spinal disability unless priate diagnosis

Plaintiff lawyers who practise in the area of personal injury law may have encountered medico-legal reports which appear to have disregarded one or more of the suggested pre-requisites to ensuring a fair and balanced report.

In the following case study, my opinion was that the plaintiff was genuine, appropriate imaging had been performed, the imaging reports were accurate and the history, physical examination findings and the imaging correlated very well to confirm that the patient had a genuine and serious low back injury as a direct consequence of his work related injury. However, in spite of this, one "expert" report did not support this man's case and he was given a "zero percent permanent impairment". This raises the question, why was a "zero percent permanent impairment" given in the face of overwhelming evidence to the contrary?

There appear to be only two possible conclusions: diagnostic ineptitude or a hidden agenda. Therefore, it is prudent for plaintiff lawyers to obtain more than one medico-legal report (of the appropriate speciality) to protect the plaintiff's interests.

Clients sent for a medicolegal opinion should be thoroughly investigated not only for medicolegal reasons but also because a spinal injury can result in severe and chronic spinal disability unless an appropriate diagnosis is made.

Medicolegal consultants who carefully look at the client as a person, and who try to come to an accurate diagnosis, find it disconcerting when the client presents with a clear history, physical findings and imaging that correlate well, leading to a diagnosis, only to find that another consultant provides an opinion that is diametrically opposed to one's findings.

## Case Example

One case, out of many, illustrates this problem with respect to a person who sustained a work-related low back injury. A 19 year old manual worker presented with constant low back pain that radiated to the right buttock, and occasionally to the left buttock, then to the back of the right leg and to the foot which felt "numb". He had classic right leg sciatica. The pain was activity related, ie. an increase in activity considerably aggravated his symptoms. He said he could walk only for approximately 300 metres and that sitting or standing still for approximately 30 minutes would increase his low back and right buttock pain. He also complained of muscle "tightness" on each side of the lumbar spine and stated that bearing down caused acute low back pain, although coughing and sneezing did not. On getting up of a morning, his low back symptoms varied from being reasonable to quite painful until he sat to eat breakfast; sitting caused a severe recurrence of low back and right leg symptoms.

His symptoms first occurred when he experienced a low back "ache" while lifting heavy items at work. He was referred for a plain lumbar spine x-ray examination. The radiologist reported a very minor lateral lumbar tilt convex to the left and centred at the very slightly thinned L4-5 disc. The zygapophysial joints were normal. Unfortunately, the significance of the slight antalgic posture to the left and the very slight thinning of the L4-5 disc were not appreciated and the young man went back to work, in spite of his symptoms. Two months after the initial injury he re-injured his low back while lifting another heavy weight (approximately 35 kg) and felt something happen in the low back region; he continued to work stoically to complete his shift. He ate dinner then went to bed but his symptoms became progressively worse, so he consulted his general medical practitioner the next morning. A lumbar spine CT scan was ordered and this showed that there was a "moderately large central and right

sided disc prolapse pressing upon the thecal sac at the L4-5 level".

The young man was then referred for a further medical opinion, at which time he presented with his plain x-ray films and the CT scan. The medical specialist agreed that the CT scan confirmed a fairly large L4-5 disc that appeared to be giving neural compromise; he also found that deep reflexes and power in the lower limbs were within normal limits and that straight leg raising was restricted to approximately 30 degrees on the right, with a positive Lasegue's sign

The medical specialist reported that the patient had a pre-existing condition (congenital spinal canal stenosis) and probably some degenerative disc disease, in spite of the radiologist reporting that at L3-4 and L5-S1 there is no canal or foraminal stenosis even though there is a generally narrow spinal canal. The medical specialist went on to say the condition was aggravated by work but that the aggravation should have ceased some two months following cessation of work and a zero percent permanent incapacity was awarded!

When I saw the client he had severe restriction of lumbar spine forward bending which increased his symptoms and there was significant pain on deep palpation of the paraspinal muscles at the L4-S1 level. Bowel and bladder function were normal. The knee jerk (L4) was normal on the left but absent on the right. The ankle jerks (S1) were normal bilaterally, as was the case with the plantar response. Pinprick sensation over the lateral aspect of the right calf (L5) and over the top of the right foot (L5) indicated subjective hypoaesthesia, with some hypoaesthesia on the sole of the right foot in the L5 dermatome. Straight leg raising in the seated and slumped forward position caused low back pain when the right leg was raised by only 5 degrees and the left leg raised 10 degrees. Supine straight leg raising was to 15 degrees on the right and to 20 degrees on the left, both tests causing a significant increase in low back pain and pain extending into his right leg. The Lasegue's sign caused low back and right leg pain when both the left and right legs were tested. Motor power in the lower

extremities was normal. Bilateral knee flexion caused a significant increase in low back pain.

A magnetic resonance imaging study, performed approximately one year post injury, showed a significant disc protrusion at L4-5 on both the sagittal T1 weighted image (Figure 1) and on the sagittal T2 weighted image (Figure 2). The axial (horizontal) view through the L4-5 disc protrusion showed a significant mid-line protrusion extending somewhat to the right side (Figure 3) that was significantly compressing the highly pain sensitive thecal tube.

The T2 weighted image also illustrated an important feature, ie. the colour of the intervertebral discs above and below the L4 level was normal (essentially white) with evidence of an intranuclear cleft (a dark line extending across the centre of the disc); the posterior aspect of the protruded disc showed some darkening, although the rest of the disc appeared grey. The importance of this finding is that it confirmed that the disc lesion occurred relatively recently because injured discs become darker grey and then black as time progresses, probably within a 12-month period of the initial injury.

The L4-5 disc lesion was seen on the lumbar CT scan and reported by the radiologist as being a moderately large central and right sided disc protrusion impressing upon the thecal sac, so this was known by the medical specialist opinion was sought. whose Furthermore, in my opinion, the patient's symptoms and signs were indicative of a large central to right sided disc protrusion, mostly likely at the L4-5 level, with the possibility that it could be at the L5-S1 level.

My opinion agreed with that of the general medical practitioner who stated that there was little doubt that the disc lesion is related to heavy lifting at work.

The question that begs an answer is: Why was this young man given a zero percent permanent incapacity when the CT scan made it clear that there was a moderately large disc protrusion at the L4-5 level? This disc pathology was subsequently confirmed by MRI examination approximately 12 months post injury.



Figure 1 Lumbar MRITI weighted sagittal (lateral) view. The arrow shows the posteriorly protruding disc material at the L4-5 disc level. Note the significant compression of the thecal sac behind the protruding disc material

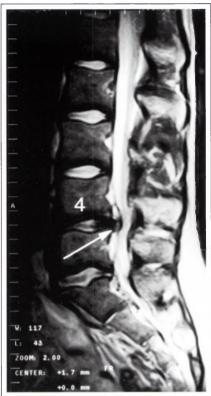


Figure 2
T2 weighted sagittal view. Arrow shows the protruding disc material that significantly compresses the thecal sac behind it. The L4-5 disc is beginning to become grey-black compared with the adjacent discs, indicating early desiccation (dehydration).

Figure 3
T1 weighted axial (horizontal) view. The white arrow shows the protruded disc material that significantly compresses the thecal sac (black arrow).

