IN THE SUPREME COURT OF BRITISH COLUMBIA

Citation: *Anderson v. Pieters*, 2016 BCSC 1243

Date: 20160426
Docket: M160840
Registry: New Westminster

Between:

Teresa Anderson

Plaintiff

And

Glen Pieters, Gold Key Sales and Lease Ltd., and Acrotech Cleaning Systems Inc.

Defendants

Before: The Honourable Mr. Justice A. Saunders

Oral Ruling on Voir Dire #1 re: Admissibility of Report of Dr. S. J. Blaskovich

Counsel for the Plaintiff:	G. A. Smith
Counsel for the Defendants:	T. Pettit
Place and Date of Trial/Hearing:	New Westminster, B.C. April 26, 2016
Place and Date of Judgment:	New Westminster, B.C. April 26, 2016

[1] **THE COURT:** We are at the commencement of a civil jury trial, a motor vehicle damages assessment. The trial was originally set for eight days and then was extended by a further two days following a trial management conference. Counsels' time estimate at the commencement of the trial had stretched to 17 days.

[2] The jury was selected yesterday morning, was given their opening instructions, and was then excused to allow for a *voir dire* into the admissibility of a report of one of the plaintiff's experts, Dr. Blaskovich, a doctor of chiropractic. The report is dated March 23, 2016.

[3] Admission of the report is objected to on two grounds. The first is on the basis of its late delivery, it not having been delivered prior to the 12-week deadline prescribed by Rule 11-7. The second objection is substantive; it is based on the report not meeting the criteria for admissibility set out in the decisions of the Supreme Court of Canada in *R. v. Mohan*, [1994] 2 S.C.R. 9, and in *R. v. J.-*

L.J., 2000 SCC 51.

[4] Now, some further comment on the background to the *voir dire*. The initial report of Dr. Blaskovich was prepared and served on March 2, 2016, less than eight weeks prior to trial. I am told by plaintiff's counsel in his submissions, and I accept, that the reason for the report being delayed is that counsel only became aware late in the day of the availability of a particular diagnostic technique utilized by Dr. Blaskovich in respect of injuries to the cervical spine. Having learned of the technique, plaintiff's counsel promptly arranged for a referral of the plaintiff to Dr. Blaskovich.

[5] The March 2nd report that resulted was subsequently amended to bring it into compliance with the requirements of the Rules, as to matters of form only; there were no substantive changes. The final report, as I have noted, was dated March 23, 2016.

[6] The plaintiff's service on the defendant of the initial report on March 2nd set off a flurry of reply and counter-reply reports, and further supplemental reports from the plaintiff's other experts. The defendants served rebuttal reports from a radiologist, Dr. Dennis L. Janzen, dated March 26, April 18, and April 20. Dr. Blaskovich swore an affidavit dated April 20, 2016, filed by the plaintiff partly in support of admission of the report, and in part as rebuttal of Dr. Janzen's April 20th report; to this, the defence responded with yet a further report of Dr. Janzen, dated April 21.

[7] In addition, the plaintiff's counsel forwarded Dr. Blaskovich's March 2, 2016 report to some of his other experts, seeking supplementary opinions; consequently, the defence was served with a further report from the plaintiff's optometrist Dr. Darren Sass, dated March 12, and a further report from her GP, Dr. Leslie Sank, dated April 11, 2016. Those supplemental reports are also under objection as to their substance and as to late delivery, and are to be addressed in further *voir dire* hearings.

[8] I will deal first with the substantive objections to the report of Dr. Blaskovich. Dr. Blaskovich purports to diagnose injury in the area of the plaintiff's C1-C2 vertebral bodies, specifically an injury to the ligaments at that level. This diagnosis is based on his interpretation of views of the plaintiff's cervical spine taken with a particular type of fluoroscope, specifically what is called a DMX device, used to capture video X-ray images of the cervical spine in motion.

[9] What Dr. Blaskovich's describes as his "Findings 1 and 2" are of ligamentous injury at the right and left sides of C1-C2. These findings are based on his interpretation of anteroposterior views taken at extremes of the patient's range of cervical rotation and extension. There is also a "Finding 3" of ligamentous injury at the C4-5 and C5-6 level. This is also based on his interpretation of DMX images, though simply a lateral view of the cervical spine taken in extension, not an anteroposterior view taken in at extreme rotation and extension.

[10] The report reproduces images from the DMX imaging studies. At page 4, there are images in respect of Finding 2. These are described in the caption as showing "abnormality", without stating the standard against which results are being is assessed. Reference is made to a standard at page 6,

where Dr. Blaskovich says:

> According to the AMA Guidelines for permanent impairment, any translation (sliding) motion which exceeds 3.5mm and/or any angular motion exceeding 11 degrees is considered a 25% Whole Person Impairment (WPI) and is therefore considered a permanent injury.

[11] Under the discussion of Findings 1 and 2, Dr. Blaskovich says this:

> In the case of Ms. Anderson, the motion x-ray results show a L side 5.9mm overhang of C1 on C2 (Figure 1) and a R side 3.9mm overhang of C1 on C2 (Figure 3). Since both of these values exceed the threshold of 3.5mm, both sides of this spinal level are ratable as a permanent injury according to the AMA Guidelines for Permanent Impairment. Together, their total Alteration of Motion Segment Integrity (AOMSI) is 9.8mm, which is the more accurate and inclusive measure of the total loss of joint integrity at this level.
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> Excessive L[eft] C1 sideward sliding motion relative to C2 is indicatory of opposite side (R[ight]) Alar and Accessory Ligament injury. Excessive R[ight] C1 sideward sliding motion on C2 therefore indicates L[eft] Alar and Accessory Ligament injury.
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> Motion x-ray revealed that Ms. Anderson has significant bilateral Alar and Accessory Ligament injury and the abnormal motion seen bilaterally is ratable and permanent according to the AMA Guides.

[12] The only standard referenced by Dr. Blaskovich in this report as to what is regarded as normal is the American Medical Association Guideline's standard of 3.5mm.

[13] Dr. Blaskovich was cross-examined in the *voir dire*. Generally – and this is more a matter of implication than explicit statements by Dr. Blaskovich – he presented his diagnostic imaging techniques as being within the mainstream of chiropractic. He conceded that the medical community does not use DMX devices on all three planes, in the fashion that he uses it. He also alluded in his evidence to his frustration at being unable to proceed with a study that would have helped him determine what is normal and what is abnormal in a cohort of young persons.

[14] Dr. Blaskovich was not specifically cross-examined on the existence or non-existence of peer-reviewed studies that support his use of DMX through or by means of anteroposterior views being taken. Nor was he cross-examined on the existence of any standards used in the medical profession or the chiropractic profession to assess injury by means of such anteroposterior fluoroscope views.

[15] On the *voir dire*, the defence called evidence from the aforementioned Dr. Janzen, a radiologist with Surrey Memorial Hospital. I was impressed with Dr. Janzen's evidence. Dr. Janzen pointed to the fact that the AMA Guideline referenced by Dr. Blaskovich explicitly states that:

> Alteration of motion segment integrity is defined from flexion and extension radiographs as a least 3.5 mm of translation of one vertebra over another.

[16] Dr. Janzen says that lateral views of flexion and extension of the cervical spine – in the manner in which Dr. Blaskovich obtained his "Finding 3" – are well within the mainstream of the medical use and application of such devices. That, he testified, is the basis upon which the AMA standard of 3.5mm was derived. In contrast, the positioning of the patient's body within the DMX device at the

extremes of left and right rotation when in extension, for the purpose of obtaining an anteroposterior view, is non-standard from the viewpoint of medical radiology. He testified that there are no known standards against which the results of such a study can be compared, and that it is therefore impossible to say if the motion seen in Dr. Blaskovich's Findings 1 and 2 of the plaintiff's C1 and C2 level are normal or abnormal.

[17] Dr. Janzen also took issue with Dr. Blaskovich's opinion that ligamentous injury can be inferred from the relative motion of the plaintiff's C1 and C2 vertebral bodies demonstrated on the Finding 1 and 2 studies. He observed that it is unknown what other types of factors, such as soft tissue injury or lack of effort, may affect results. This is addressed in detail in Dr. Janzen's report of April 18, 2016. He was asked,

> Can the DMX assessment reliably differentiate normal/asymptomatic individuals from abnormal/symptomatic/injured individuals?

His answer was as follows:

> The DMX technique relies on fluoroscopic imaging and measurements obtained during dynamic motion of the cervical spine. Very small differences (submillimeter) between the right and left sides are proposed to be definite indicators of abnormality or injury. The human body is not necessarily perfectly symmetric. Ranges of motion may be different due to a variety of causes, such as minor congenital-developmental variation, preexistent or concurrent joint degenerative change, inconsistent levels of effort during active motions of the joint, incomplete range of motion on one side secondary to extrinsic soft tissue pathology. For instance, the DMX images obtained during lateral flexion of the neck (see Figures 1 and 2 in the report from Dr. Blaskovich, March 23, 2016) could easily be affected by muscle stiffness, soreness, or pain in the cervical soft tissues. This would limit the range of motion of the joint, and would produce asymmetric measurements.
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> This issue would best be resolved by a randomized clinical trial, in which normal/asymptomatic individuals and abnormal/symptomatic individuals were assessed by blinded observers. I am unable to find any information regarding this issue in the published peer-reviewed medical literature.

[18] Dr. Blaskovich was not asked in the course of his testimony during the voir dire to comment on that aspect of Dr. Janzen's report.

[19] As I have stated, Dr. Blaskovich's Finding 3 used lateral studies of the plaintiff's cervical spine in extension. He writes:

> As depicted in Figures 5 and 6, the ALL has been injured at the level of C4-5 and C5-6. Injuries to the ALL at C4-5 and C5-6 are permanent, but not ratable according to the AMA Guides.
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> -C4-5 shows a posterior shift of 3.0mm and C5-6 shows a posterior shift of 2.5mm. As these values do not exceed the threshold of 3.5mm, the spinal levels of C4-5 and C5-6 are not ratable, but are considered as permanent injuries according to the AMA Guidelines for Impairment.

[20] Dr. Blaskovich does not cite in his report what portion of the AMA Guidelines for Impairment would lead to these results as being classified as a "permanent" injury.

[21] Dr. Janzen stated in his testimony on the *voir dire* that he had "no problem" with the technique used by Dr. Blaskovich in respect of Finding 3. He testified that the AMA Guideline of 3.5mm applies. However, he stated that by reference to that standard, the results are normal.

[22] Dr. Janzen went on to say that as regards interpretation of the studies, there is always some margin of error and the measurements are always difficult to reproduce. He testified that a 5mm structure could be measured as 4mm or 6mm. He said that he is "skeptical" of a measurement of exactly 3.9mm; he would view it as 3.9 +/- 1.0 or even +/- 2.0mm.

[23] Dr. Blaskovich states in his report:

> Motion X-Ray of Ms. Anderson's cervical spine indeed revealed more damage to the right Alar and accessory ligaments than the left, as depicted by more abnormal and excessive motion, as would be biomechanically expected from the obtained collision details.

Dr. Janzen described this comment as "highly speculative".

[24] Dr. Janzen was not cross-examined in the *voir dire*. Following Dr. Janzen's testimony, the plaintiff did not ask for Dr. Blaskovich to be recalled to give rebuttal evidence.

[25] We then adjourned at approximately 12:45 p.m. today, with me advising counsel that we would be reconvening at about three o'clock, for me to give my ruling. At about 2:30 p.m., I was advised that counsel for the plaintiff had another submission to make regarding newly-obtained information from Dr. Blaskovich. Upon my return to court, counsel for the plaintiff advised me that he had had a telephone conversation with Dr. Blaskovich over the break in which he had asked Dr. Blaskovich specifically, "What is the normal range of motion of C1 and C2 laterally?" This question was in respect of concerns I had raised during submissions on the *voir dire* as to the absence in Dr. Blaskovich's report of any explicitly stated standard for what is "normal", other than the AMA Guideline figure of 3.5mm.

[26] I am told by counsel that Dr. Blaskovich's answer to that question was, "Zero"; that there should not be any overhang at all. Counsel advises that he was told by Dr. Blaskovich that this view of what is normal is based on Dr. Blaskovich's experience and, to the knowledge of Dr. Blaskovich, on the experience of others who use the DMX device in a similar fashion.

[27] Counsel advised that Dr. Blaskovich further stated that it is true that the AMA standard makes reference to studies being done in flexion and extension only; however, he views that analysis and that Guideline as being "out of date" and "silly". He and people like him do routinely undertake studies of the type he did in respect of Findings 1 and 2, and, to his knowledge, neurosurgeons perform surgery to stabilize vertebrae, given findings of the type that he has relied on in his report.

[28] On the basis of this further evidence of Dr. Blaskovich I was asked by counsel to reopen the *voir dire*. Counsel for the plaintiff submits that there was no reason to believe, before hearing Dr. Janzen's testimony, that the derivation of Dr. Blaskovich's standard of what constitutes "normal" was even an issue. Counsel pointed out that Dr. Janzen provided new evidence this morning, and he has been limited in his ability to respond. I will say more about counsel's submissions shortly.

[29] The role of a trial judge in serving as a gatekeeper with respect to scientific evidence was summarized very effectively by Mr. Justice Romilly of this court in a case called *United City Properties*

Ltd. v. Tong, 2010 BCSC 111:

> [55] The leading case in this area – *Mohan* – established four criteria which expert evidence must meet before it should be ruled admissible at p. 20:
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> (a) relevance;
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> (b) necessity in assisting the trier of fact;
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> (c) the absence of any exclusionary rule; and
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> (d) a properly qualified expert.
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> [56] Sopinka J., writing for the Supreme Court of Canada, elaborated on the criterion of relevance, stating that admissibility depends not only on logical relevance, but also on a cost-benefit analysis. Justice Sopinka went on to explain the particular costs involved with expert evidence at p. 21 [he said this]:
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> > Cost in this context is not used in its traditional economic sense but rather in terms of its impact on the trial process. Evidence that is otherwise logically relevant may be excluded on this basis, if its probative value is overborne by its prejudicial effect, if it involves an inordinate amount of time which is not commensurate with its value or if it is misleading in the sense that its effect on the trier of fact, particularly a jury, is out of proportion to its reliability.
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> > There is a danger that expert evidence will be misused and will distort the fact-finding process. Dressed up in scientific language which the jury does not easily understand and submitted through a witness of impressive antecedents, this evidence is apt to be accepted by the jury as being virtually infallible and as having more weight than it deserves.
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> [57] The court focused on the tendency of juries to accept expert evidence at face value, which in turn requires vigilance on the part of trial judges in determining whether the weight that a jury might give the evidence would be out of proportion to its reliability; if it would, it should not be admitted. The threshold becomes even more strict as the evidence approaches the ultimate issue in the case or if it involves novel science: *Mohan*, at p. 25.
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> [58] In *R. v. J.-L.J.*, 2000 SCC 51, the Supreme Court of Canada dealt specifically with the trial judge's gatekeeper function *vis-à-vis* experts in the context of novel scientific evidence. Justice Binnie, for the Court, reiterated the statements from *Mohan* quoted above, and remarked on the trial judge's role as gatekeeper at para. 28:
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> > In the course of *Mohan* and other judgments, the Court has emphasized that the trial judge should take seriously the role of "gatekeeper". The admissibility of the expert evidence should be scrutinized at the time it is proffered, and not allowed too easy an entry on the basis that all of the frailties could go at the end of the day to weight rather than admissibility.
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> Further, at para. 47:
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> > ... Because the concept of relevance provides a low threshold ("some tendency"), *Mohan* built into the relevance requirement a cost-benefit analysis to determine "whether its value is worth what it costs" (p. 21) in terms of its impact on the trial process. Thus the criteria for reception are relevance, reliability and necessity measured against the counterweights of consumption of time, prejudice and confusion ...
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> > [Emphasis in original.]

[30] I find that Dr. Blaskovich's report does not meet the test of reliability. His use of the DMX devices in respect of Findings 1 and 2 is not within the mainstream of scientific use. This practice appears to be confined to some chiropractors; that is all we have evidence of in terms of its use.

[31] The plaintiff has presented no peer-reviewed studies and no body of data that give the court

any assurance as to the validity of Dr. Blaskovich's conclusions regarding C1-C2 studies.

[32] The plaintiff's counsel in his submissions on re-opening the *voir dire* noted that the objections taken by Dr. Janzen were, to some extent, newly-posited during the course of Dr. Janzen's *voir dire* testimony. That is true of some of what Dr. Janzen had to say. However, it is the case that the onus of proving the admissibility of scientific opinion rests with a plaintiff and, regardless of whether specific objections are presented – and in this case, some latitude has been given both parties in the context of the *voir dire*, because of the circumstances of the late delivery of Dr. Blaskovich's report and the scramble that that has given rise to – it is always the case that a plaintiff must anticipate issues with reliability and be prepared to respond to them.

[33] Dr. Blaskovich's report had, to be frank, a gaping hole in it with respect to the absence of an explicitly articulated standard. Even if it had been delivered in time, and even if we did not have the benefit of Dr. Janzen's *voir dire* testimony, I would have had serious concerns with the propriety of putting a report in this form to a jury. The risk of his opinion evidence being misunderstood and the fact-finding process thereby being distorted is significant.

[34] Furthermore, Dr. Blaskovich's failure to acknowledge, in his Report, that the AMA Guidelines did not endorse the use of the 3.5mm standard other than in respect of lateral studies of flexion/extension, was shocking. Expert witnesses have a duty to assist the court and not to be an advocate for any party: Rule 11-2(1). That duty includes a duty of complete candour; an expert is entitled to advance a theory, but to fulfill the obligation to assist the court, evident weaknesses or deficiencies in the theory must by candidly disclosed. It is simply unacceptable to omit such discussion from an expert report, and leave it to chance as to whether an opposing party's counsel uncovers the weakness through cross-examination. This failure on Dr. Blaskovich's part lends an air of advocacy to his report, giving rise to further concern as to its admissibility.

[35] There are fewer concerns with respect to Dr. Blaskovich's Finding 3, in that the lateral study of the C4-5 and C5-6 levels made appropriate use of the 3.5mm standard in the AMA Guideline. However, the difficulties presented by the inherent margin of error attested to by Dr. Janzen – and Dr. Janzen was not cross-examined on this point – put this opinion in the category of those where there is a real risk of a jury giving the report credence, out of proportion to its reliability.

[36] I would therefore exclude the report on substantive grounds. I come to this conclusion, notwithstanding the submissions that were made by counsel when we reconvened as to the further information that Dr. Blaskovich has to offer. That further information, even if it were to be given some weight, only partially compensates for the deficiencies in his report.

[37] Moreover, this late information from Dr. Blaskovich and the manner in which it was presented to the court brings me to the issue of the inadmissibility of the report by reason of the late service. Wholly apart from the concerns I have just articulated with respect to reliability and with respect to the issues raised by Dr. Janzen, I would also exclude the report on that basis. The prejudice arising out of the

late service of the report was compounded, and the significance of the lateness, brought into further clarity by the new opinion purportedly offered by Dr. Blaskovich as to what constitutes a "normal" range.

[38] The flurry of activity that counsel have had to engage in since the service of Dr. Blaskovich's report, and then the flurry of activity we have had to engage in, in this *voir dire*, with Dr. Janzen suddenly being made available to testify this morning and then with further opinions being generated by Dr. Blaskovich, and the court being advised of them orally through counsel's submissions, only highlights the folly of attempting to adduce evidence, particularly in the context of a jury trial, without sufficient notice, that is the 12-week period specified by the Rules of Court. Counsel have both strived mightily to adjust to the circumstances, but even if we had the luxury of time within the context of this jury trial to call further evidence by Dr. Blaskovich, I am not at all persuaded that we would have a sufficient degree of clarity, and that counsel would have sufficient time to overcome the prejudice that has arisen from the report only having been provided late in the day and the resulting time pressure that has put on counsel to absorb the consequences of the report and to mount a response.

[39] So, on both those two grounds, the report of Dr. Blaskovich is excluded in its entirety.

"A. Saunders J."