

CANADA / JUDGMENT

Lalani v. Lear

2025 BCSC 1528

COURT

Supreme Court of British Columbia

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2025 BCSC 1528 Lalani v. Lear

IN THE SUPREME COURT OF BRITISH COLUMBIA

Citation:

Lalani v. Lear,

2025 BCSC 1528

Date: 20250807

Docket: S150608

Registry: Vancouver

Between:

Omar Lalani

Plaintiff

And

Dr. Clement Lear

Defendant

Before: The Honourable Justice Marzari

Reasons for Judgment

The Plaintiff, appearing in person:

O. Lalani

Counsel for the Defendant:

R.S. Watts

S. Purcarin

Place and Dates of Trial:

Vancouver, B.C.

January 13-17, 20-24, 27-31, 2025

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July 11, 2025

Place and Date of Judgment:

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August 7, 2025

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INTRODUCTION

- [1] Omar Lalani brings this action against his childhood orthodontist, Dr. Clement Lear, in relation to his orthodontic treatment in 1989 when Mr. Lalani was 11 or 12 years old. At the crux of this action is Mr. Lalani's assertion that his cervical headgear caused a narrowing of his upper airway and the onset of obstructive sleep apnea, for which he seeks considerable damages. Mr. Lalani also has a broader goal in bringing this action: he seeks to prove that cervical headgear is inherently dangerous to the human respiratory system and should be banned.
- [2] Mr. Lalani first discovered that he had sleep apnea in 2013 when he was in his mid-thirties. He did not come to believe this was caused by his childhood headgear until sometime later as a result of his own research and investigations. He filed this claim in January 2015, and made a formal complaint to the College of Dental Surgeons of BC (the "College") in April 2015 regarding his headgear.
- [3] Mr. Lalani's notice of civil claim relates to his treatment with both cervical headgear and a "fixed width retainer." Mr. Lalani adduced very little evidence with respect to this retainer, and at the time of trial his focus was entirely on the headgear. Mr. Lalani alleges that in recommending and implementing the use of cervical headgear, Dr. Lear failed to advise him and his mother of several adverse side effects which Dr. Lear was aware of or ought to have been aware of, including "the risk of causing craniofacial deformity," "the risk of restricting the growth of the airway," and "risks causing respiratory problems and obstructive sleep apnea."

- [4] Mr. Lalani further alleges that his cervical headgear caused him physical injury. At trial, he focused on allegations that his headgear caused his upper and lower jaws to be undergrown and backwardly positioned, deformed his airway, and caused him to develop obstructive sleep apnea ("OSA"). Mr. Lalani argued at trial that all of these injuries are essentially "interchangeable" in that they all relate to his claim that his headgear caused him to develop OSA. It is the OSA which he says caused his fatigue, which then led to his pecuniary and non-pecuniary losses.
- [5] Mr. Lalani pleads that Dr. Lear "was negligent in the advice he gave" and that Dr. Lear's "non-disclosure of the material risks of the cervical headgear treatment he recommended vitiated [his] consent to the treatment such that the defendant's implementing that treatment constituted battery."
- [6] Dr. Lear died in late 2015, before being served with this claim. A response was filed on his behalf in late 2016, denying all of the allegations against him.
- [7] This trial was set to proceed multiple times between 2019 and 2023, before proceeding earlier this year.
- [8] For the reasons that follow, I find that Mr. Lalani has not made out his claims.

ISSUES

- [9] At trial, Mr. Lalani narrowed the issues in his pleadings considerably. In his opening and closing submissions, Mr. Lalani focused primarily on the issue of whether Dr. Lear had obtained his informed consent to cervical headgear treatment in 1989, and in particular the fact that Dr. Lear did not advise him or his mother of the risks to his airway that he says the headgear caused.
- [10] Mr. Lalani also advanced claims in general negligence and battery. His negligence claim was focused on the allegation that his cervical headgear caused a narrowing of his upper airway giving rise to obstructive sleep apnea. The battery claim was advanced on the basis of Dr. Lear's proceeding with the cervical headgear treatment without first obtaining Mr. Lalani's, or his mother's, informed consent to a treatment that was known to cause airway narrowing and OSA.
- [11] Mr. Lalani led little evidence regarding other injuries he plead he suffered as a result of his cervical headgear, including his claims that the positioning of his teeth has been adversely affected or that he has suffered severe periodontal tissue and oral bone loss. He adduced some expert evidence of these injuries through a dentist, Dr. da Cruz, but he agreed in closing submissions that this was not the thrust of his claim.
- [12] Mr. Lalani adduced very little evidence with respect to Dr. Lear's implementation of his headgear. Although Mr. Lalani testified that Dr. Lear would tighten his headgear, and that Mr. Lalani would encourage him to do so because he had been told it would create better results, there is little evidence about precisely how frequently his headgear was tightened,

or what its tightness settings were. Nor did Mr. Lalani lead any expert evidence on the standard of care regarding how tight Mr. Lalani's headgear should have been or how often it should have been tightened to meet Dr. Lear's standard of care. The qualified expert evidence on the standard of care of an orthodontist led by Mr. Lalani was focused almost entirely on the use of headgear at all, not its particular tuning.

[13] Mr. Lalani has the burden to prove the factual elements of his claim. He also has the burden of establishing the standard of care of Dr. Lear, that this standard was breached, and that he and his mother were not advised of side-effects of the recommended treatment that were known or ought to have been known by Dr. Lear. Finally, Mr. Lalani has the burden of establishing that Dr. Lear's breach of any of the above caused his losses, and what those losses were.

[14] The factual disputes that require resolution in this case are as follows:

- a) What was Mr. Lalani's pre-treatment (pre-headgear) condition?
- b) What was Mr. Lalani's headgear meant to address?
- c) What did Dr. Lear tell Mr. Lalani and his mother about the headgear, including about possible side effects?
- d) For how long and how often did Mr. Lalani wear the headgear?
- e) What was Mr. Lalani's condition after wearing the headgear, both in the near and longer terms?
- f) Did Mr. Lalani develop OSA, and if so, when?
- g) What has Mr. Lalani been prescribed or recommended to address his diagnosis of OSA?
- h) What has Mr. Lalani done to address his diagnosis of OSA, and to what extent has this been successful?

[15] Having regard to the legal tests for negligence and informed consent to care, which will be outlined later in these Reasons, the legal issues that require resolution in this case are as follows:

- a) What was the standard of care of an orthodontist relating to the use of cervical headgear at the time Mr. Lalani received his headgear?
- b) Did Dr. Lear breach that standard of care?
- c) Were orthodontists required to inform their patients about a known risk to the airway or the development of OSA as a result of using cervical headgear in order to obtain informed consent in 1989?
- d) Did Dr. Lear conceal or fail to disclose a known risk to Mr. Lalani's airway in obtaining informed consent to the use of cervical headgear on Mr. Lalani?

- e) If there was a breach of the standard of care in the use of cervical headgear, or of the requirement to obtain informed consent for the cervical headgear, did the cervical headgear cause Mr. Lalani to develop OSA?
- f) If Mr. Lalani's cervical headgear did cause him to suffer from OSA, did Mr. Lalani's OSA cause him losses, and if so, how much?

THE EVIDENCE

[16] Several issues arose during the trial regarding the admissibility of the evidence. During the trial itself, I held a number of voir dres on admissibility issues and gave oral reasons on these.

Hearsay Evidence

- [17] As is common, particularly when a party represents himself as Mr. Lalani has done, a great deal of hearsay evidence is given at trial, not all of which was subject to a formal objection. For example, Mr. Lalani frequently testified to things other people told him (including his sister and medical technicians) about various things, including his sleep apnea when he began investigating that possibility around 2013. I have considered these statements where relevant and admissible to the narrative. I have not relied upon hearsay evidence for the truth of its contents, and not for the truth of medical opinion evidence not qualified before me at trial.
- [18] One important exception to this is the letter written by Dr. Lear to the College, dated May 19, 2015 (the "College Letter") in response to Mr. Lalani's complaint against him dated April 17, 2015. I held a voir dire to consider the admissibility of Dr. Lear's factual statements in the College Letter for their truth, and in oral reasons I found that Dr. Lear's statements were admissible pursuant to the principled exception for hearsay, and notwithstanding the provisions of s. 53 of the Health Professions Act, R.S.B.C. 1996, c. 183.

Clinical Records

- [19] This being a medical malpractice claim regarding physical injuries, clinical records were also referenced and relied upon by experts, and by both parties.
- [20] The parties signed a document agreement regarding the use and admissibility of the clinical records tendered in evidence at this trial. The terms of that agreement provided that opinion evidence in clinical records, for example medical diagnoses, are admissible only to establish that the opinion was held and recorded, but not for the truth of the opinion.
- [21] Facts recorded in clinical records, however, were agreed to be generally admissible "subject to proof to the contrary or specific objection as to admissibility." The document agreement included the following as facts that might be so proved by Mr. Lalani's clinical records:
- the doctor or healthcare professional in question saw Mr. Lalani on the day in question;

- the examination findings were as recorded and can be taken as proof of the facts of those findings;
- treatments were prescribed as recorded;
- medication was prescribed as recorded;
- any medical procedures or tests occurred as stated in the clinical records;
- the imaging findings were as recorded and can be taken as proof of the facts of those findings.

[22] Although some "findings" on medical examinations or in imaging have an element of expertise beyond a simple statement of fact, I consider the parties' agreement on the use of these documents a reasonable one, and largely in accord with the common law: see, e.g., *Firman v. Asadi*, 2018 BCSC 2437; *Mazur v. Lucas*, 2010 BCCA 473.

[23] As such, I have generally accepted the results and observations stated in imaging reports and clinical examinations for their truth. Although some of the imaging and clinical testing records adduced by Mr. Lalani in support of his case seem to have been privately commissioned for this litigation, rather than prepared in the ordinary course of his medical treatment through his doctors, no specific objection was made on that basis to most of these records and the document agreement appears to relate to all of these records.

Expert Witnesses

[24] Prior to trial, Mr. Lalani served over 20 expert reports on the defendant. At trial, he sought to adduce ten reports from nine experts, of which the defendant formally objected to five, including one prepared by Mr. Lalani himself.

[25] I held voir dres on the admissibility of these reports and gave oral reasons during the trial. I did not allow the expert report authored by Mr. Lalani himself on the basis of his lack of impartiality in his own case. I also found that the report of Dr. Subhasish M. Chowdhury, a professor of economics and game theory in the United Kingdom, was inadmissible as irrelevant to the legal and factual issues before me, and generally unnecessary.

[26] I allowed Mr. Lalani to rely on the remaining eight reports, subject to considerations of weight and admissibility arguments that might arise in closing submissions after cross-examination. Of these reports, two related to his claim in damages (prepared by Darren Benning and Michael Dost), which I will address further below. The remaining six reports were tendered with respect to liability issues including the standard of care, informed consent, and causation. These six reports were authored by five experts as follows:

- a) Dr. William Hang, a retired American orthodontist (two reports);
- b) Dr. Alfred Coren, a retired Australian oral surgeon;
- c) Dr. Joseph da Cruz, an Australian dentist;

- d) Dr. David McCarty, an American sleep medicine doctor; and
- e) Dr. Khai Phan, Mr. Lalani's family doctor.

[27] The defendant called Dr. Benjamin Pliska as an expert witness on the liability issues, and Sergiy Pivnenko, an economist, on the quantification of damages.

Credibility and Reliability of Lay Witnesses

- [28] The principles applicable to the consideration of lay witness evidence are well established and include the well-known statement of O'Halloran J.A. in *Farnya v. Chorny*, [1952] 2 D.L.R. 152, [1951] B.C.J. No. 152 (C.A.) to the effect that ultimately, the validity of the evidence depends on whether it "is consistent with the probabilities affecting the case as a whole and shown to be in existence at the time".
- [29] All of the lay witnesses before me were called by Mr. Lalani in his case, and included family members, a childhood friend, a former colleague of his in 2008 at a venture capital company he joined after earning his master's degree, a former employer at a start-up company, and his current employer.
- [30] Mr. Lalani's mother and sister could not remember some details about Mr. Lalani's childhood with clarity, and in some cases their recollections of distant events in Mr. Lalani's childhood were not entirely consistent with each other or Mr. Lalani's own evidence. Despite these understandable lapses of memory, their credibility was generally unchallenged. The same is true of the other lay witnesses. The defendant agrees that these witnesses generally gave their evidence in a "forthright manner, and in a genuine attempt to be helpful."
- [31] Mr. Lalani testified on his own behalf. He struck me as sincere and concerned about keeping his oath to tell the truth and maintaining the confidence of the Court. At the same time, his evidence was somewhat theatrical, delivered as a narrative laced with rhetoric and intended to evoke emotion or reaction, rather than a recitation of primarily factual information. His evidence was also strongly thematic, leaving me with concerns about the completeness of his evidence, including what may have been left out of the narrative he crafted. Mr. Lalani also had an unfortunate tendency to stray into hyperbole and argument, and into areas that are properly the subject of expert opinion.
- [32] Mr. Lalani's evidence also differed on several material points from his evidence on discovery. Of note, his recollection of events at the initial consultation with Dr. Lear differed somewhat as between his discovery and trial evidence. In addition, his initial trial evidence significantly downplayed the change in his sleep and respiratory systems in 2013, before he adopted his evidence on discovery that there was a "drastic" change in his symptoms that year.

FACTUAL FINDINGS

What was Mr. Lalani's pre-treatment (pre-headgear) condition?

- [33] There is little clinical orthodontic evidence as to Mr. Lalani's pre-treatment condition. This is, in part, because Mr. Lalani did not bring his lawsuit until more than 20 years after his treatment had completed, and Dr. Lear no longer had many of his files at that time. However, there is some evidence at trial that helps to establish Mr. Lalani's pre-treatment condition, including some of Mr. Lalani's medical records, Dr. Lear's remaining clinical records, and Mr. Lalani and his mother's recollection of their initial consultation with Dr. Lear.
- [34] Mr. Lalani, his mother, his sister and his childhood friend also provided testimony as to Mr. Lalani's disposition, activity levels and general health prior to seeing Dr. Lear.
- [35] Ms. Nasreen Lalani, the plaintiff's mother, testified that at around the ages of seven to ten, her son was confident, healthy, and athletic. She further testified that he was an early riser and had no troubles sleeping or waking up. She testified that although her son had buck teeth, he never complained about this nor experienced any bullying. His sister agreed that he was active and got up early as a child. His friend, Mr. Cohn, remembers him being an active kid.
- [36] Mr. Lalani testified that when he was young, prior to getting his headgear, he was active and athletic, enjoying running and playing sports, and had no problem waking up early. He testified that he was aware he had buck teeth, but did not perceive this as a problem.
- [37] Mr. Lalani experienced a facial skull fracture around his cheek, requiring surgery, when he was five years old, and later injured his neck in 1987 at the age of eight. It is possible, on the evidence of some of Mr. Lalani's experts on cross-examination, that the facial injury may have contributed to his deviated septum and the neck injury to other "deformities" noted in their reports. However, it is equally possible on the evidence before me that Mr. Lalani had a deviated septum before that date, or that he developed one at any time before 2013, when it was first recorded in his medical records related to sleep apnea testing that year. I have no evidence that his neck injury caused him to have a narrower than average airway.
- [38] On the evidence before me, I am unable to determine whether Mr. Lalani had a larger or smaller than average windpipe for his age at 11 years old. I am not satisfied that the fact that Mr. Lalani slept well as a child means that he had a larger than average windpipe for his age when he was a child (or a windpipe of any particular size). Nor do I accept Dr. da Cruz's suggestion that he is able to determine Mr. Lalani's airway size retroactively from examinations done of Mr. Lalani in his thirties, and from some childhood photographs sent to Dr. da Cruz by Mr. Lalani.
- [39] I find that, before receiving treatment from Dr. Lear and up to the age of 11 years old, Mr. Lalani was an active child who generally slept well and had no issues with waking up in the morning. He had buck teeth, with an overjet and malocclusion, meaning his front teeth extended over his bottom teeth in some places. I also find that he had overcrowding of his upper teeth.

What was Mr. Lalani's headgear meant to address?

[40] Mr. Lalani states that he was referred to Dr. Lear for what his dentist at the time called "bucked teeth". He testified that Dr. Lear told him that his upper jaw had moved too far forward and needed to be held back to allow the lower jaw to catch up, and that he had overcrowding of his teeth. Mr. Lalani testified that he understood the purpose of the cervical headgear was to hold back his upper jaw to allow his lower jaw to come forward, and to create space between the teeth in his upper jaw, which would alleviate the crowding.

[41] Ms. Lalani, testified that she remembers Dr. Lear saying that he could fix her son's bucked teeth, that cervical headgear would work well for her son, and that he would not have bucked teeth at the end of the treatment. Dr. Lear also mentioned tooth extractions, but he did not recommend that approach, and neither did she. She testified on cross-examination that Dr. Lear said Mr. Lalani's bite was not properly aligned and used terminology like "malocclusion".

[42] The evidence of both Mr. Lalani and his mother establishes that they were interested in the treatment primarily of Mr. Lalani's bucked teeth and went to see Dr. Lear for that treatment. I find that Mr. Lalani was highly motivated in this regard; he wanted the cervical headgear to work, thought it would be "great" and "even better" if his lower jaw grew "too much" as a result, and agreed on cross-examination that he asked Dr. Lear to tighten his cervical headgear to make it work faster and better.

[43] The defendant's direct evidence on this point is confined to the contents of the College Letter he wrote in response to Mr. Lalani's complaint. The relevant portions read as follows:

At the initiation of this patient's treatment, I pointed out to him and his parents that there was significant space deficit in the dental arches, especially in the upper arch.

Overall the malocclusion was a Class II division I.

The space deficit could be addressed by premolar extraction, but a better approach would be to use a cervical headgear. This would create upper arch space while allowing the mandible to grow forward. This system was widely used by B.C. Orthodontists at that time (1989).

[44] In this Letter, the defendant identifies that Mr. Lalani had a class two malocclusion, which I understand from the expert evidence before me to be the clinical term for misalignment and projection of the upper teeth beyond the lower teeth -- or buck teeth. The College Letter also states that the intent and purpose of the cervical headgear was to correct "significant space deficit in the dental arches" and create upper dental arch space to relieve the crowding, while allowing the lower jaw to grow forward.

[45] Mr. Lalani contends that Dr. Lear diagnosed him with an overgrown upper jaw during their initial consultation, and that the cervical headgear was also intended to displace his upper jaw backwards in order to treat this diagnosis.

- [46] Dr. Lear's College Letter does not mention a diagnosis of an overgrown upper jaw, nor does it mention any objective pertaining to the backward movement of the upper jaw, as Mr. Lalani contends. Instead, it discusses the making of greater space in the upper dental arch for Mr. Lalani's teeth.
- [47] The College Letter is consistent with Dr. Pliska's evidence as to how cervical headgear was and is generally expected to work by orthodontists. I find that in the general practice of orthodontics, cervical headgear is understood to temporarily restrain the growth of the upper jaw. However, it is not known to, or intended to, result in any clinically significant backward movement of the upper jaw or to permanently restrain its growth.
- [48] On all the evidence, I find that the cervical headgear was intended to address Mr. Lalani's bucked teeth, together with the failure of his upper and lower teeth to meet, and the crowding of his upper teeth, as diagnosed by Dr. Lear. The mechanism by which the cervical headgear was meant to work was by pulling Mr. Lalani's upper molars backward within his upper dental arch to alleviate crowding in his teeth, and also to allow the lower jaw to grow forward relative to his upper dental arch.
- [49] However, on the evidence before me, I cannot find that the cervical headgear was also intended to retract the his upper jaw, as asserted by Mr. Lalani. On the evidence as a whole, including Mr. Lalani's own evidence, his statements to Dr. Coren in 2017, and his mother's evidence, I find that Dr. Lear did not diagnose Mr. Lalani with an "overgrown upper jaw" or suggest that the goal of the cervical headgear treatment was backward movement of the upper jaw (though backward movement of his upper molars was intended). I do accept Mr. Lalani's evidence that he was told that the cervical headgear would restrain or slow forward growth of his upper jaw while the lower jaw grew forward relative to his upper jaw while he wore the headgear.

What did Dr. Lear tell Mr. Lalani and his mother about the headgear, including about possible side effects?

- [50] There are no contemporaneous records of the initial consultation appointment available, nor any file materials that would indicate written acknowledgement of consent, or lack thereof. I do not fault Dr. Lear for not still having all of Mr. Lalani's records given the considerable time period between treatment and Mr. Lalani serving this claim in 2016 (after Dr. Lear's death).
- [51] Mr. Lalani submits that Dr. Lear told him and his mother that the only alternative to cervical headgear was extractions, and that cervical headgear was the better choice. At times during his testimony, Mr. Lalani said that Dr. Lear told them that cervical headgear was free of side effects. At other times, he says that Dr. Lear told them his lower jaw could grow too much, and that he might need to have a nerve cut in his neck if this happened.

- [52] Mr. Lalani's evidence that there was discussion of possible side effects of the growth of his lower jaw is aligned with his mother's evidence. I find that there was a discussion of side effects, and this was mentioned.
- [53] However, there is no independent support for Mr. Lalani's evidence that Dr. Lear suggested that he might require a nerve in his neck to be cut. Dr. Lear categorically denied having made such a statement in the College Letter. Ms. Lalani did not recall this either. There is also no medical evidence to suggest that such a step might have to be taken or why. I find that Mr. Lalani was eleven years old at the time and has likely misremembered this detail.
- [54] Overall, I find that the evidence given by Mr. Lalani and his mother relating to what Dr. Lear told them about cervical headgear and potential side effects is sparse and at times, inconsistent. I also find that it is likely incomplete.
- [55] On the evidence, I find that Dr. Lear discussed the lower jaw growing more than was desirable as a side effect of cervical headgear, and he may have discussed other side effects that Mr. Lalani and his mother no longer recall. Little turns on these potential additional side effects, as they are not the subject of this litigation in any event. Both the defendant and Mr. Lalani agree that Dr. Lear did not advise Mr. Lalani or his mother that the narrowing of his airway was a possible side effect of cervical headgear, and I accept this evidence.

For how long and how often did Mr. Lalani wear the headgear?

- [56] Mr. Lalani submits that he wore his headgear for two years, initially during the day and at night to sleep, and later only in the evenings at home and to sleep.
- [57] On cross-examination, Mr. Lalani admitted that despite being initially advised to wear the headgear all day, on his own initiative he stopped wearing it to school. He could not recall if he then continued to wear it in the evenings, or only while sleeping.
- [58] Mr. Cohn, Mr. Lalani's childhood friend, testified that he remembers seeing Mr. Lalani wearing cervical headgear. Ms. Parpia, the plaintiff's sister, testified that she remembers Mr. Lalani wearing cervical headgear in their home, but cannot remember his precise age or exactly when he wore it.
- [59] I find that Mr. Lalani wore his cervical headgear for two years, initially during the day and night, as he was told to do, but soon after beginning the treatment switched to wearing it at night only. Mr. Lalani has not proven that he wore the cervical headgear more often than that.

What was Mr. Lalani's condition after wearing the headgear, both in the near and longer terms?

Near Term: Highschool Years

- [60] Mr. Lalani submits that, immediately after beginning to wear his cervical headgear, he began waking up later and experiencing fatigue in the mornings. He often missed breakfast and was late for school or other commitments, causing his family members to be late. He

submits that his involvement in sports and extracurricular activities suffered, and sleeping at school became "habitual". Although Mr. Lalani says this was immediate, and affected him in grade seven, his mother's evidence about his tiredness was more equivocal and related to when he was in high school.

- [61] Ms. Lalani testified that her son was often tardy in high school, despite her attempts to alter this behaviour. She explained that he also displayed irritability, and that his fatigue and energy levels would get better throughout the day. She spoke to their family doctor, who suggested that Mr. Lalani's fatigue was normal for his age.
- [62] Ms. Parpia, testified that around the age of 12 or 13, Mr. Lalani became difficult to get out of bed, which made her late for school because their mother often drove them together. She testified that this was "very different" than before.
- [63] Similarly, Mr. Cohn testified that he observed a "marked difference" in Mr. Lalani between elementary school and high school, as Mr. Lalani's activity levels changed, and he began to exhibit a pattern of significant lateness and a sense of "distance" or "fogginess". Mr. Cohn testified that he remembers seeing Mr. Lalani napping during the day in the peer counselling office at school.
- [64] Nevertheless, the evidence is that Mr. Lalani excelled in high school and his extracurriculars, including competitive debate. He went to the world finals in the Olympics of the Mind in grade 11. He competed on the track team, even though he had asthma. He got the top mark in math in the province on graduation and was the school valedictorian.
- [65] In the College Letter, the defendant states that the cervical headgear led to "excellent tooth alignment in both arches, coincident midlines and optimal overbite and overjet". Mr. Lalani agreed on cross-examination that his teeth appeared straighter in the photographs and radiographs of his teeth after the cervical headgear, than those before the cervical headgear.
- [66] Dr. Pliska also reviewed Dr. Lear's treatment records for Mr. Lalani. He provided the following opinion in this respect based on Mr. Lalani's imaging and dental casts at the time:

The result of the orthodontic treatment provided by Dr. Lear to Mr. Lalani was an excellent, if not ideal, occlusion and alignment of Mr. Lalani's teeth. The original Class II malocclusion, evidenced by the photographs of the pre-treatment models, was successfully treated by Dr. Lear in a timely and efficient manner of approximately 24 months.

- [67] I accept Dr. Pliska's assessment in that regard, as well as his opinion that Mr. Lalani's more recent clinical records show long term stability with respect to this result. For reasons stated below, I am unable to accept the opinion of Dr. da Cruz, to the extent that it contradicts the above assessment with respect to the post-treatment alignment and occlusion of Mr. Lalani's teeth and dental arches.

- [68] I find that the evidence establishes that around the time Mr. Lalani started high school, which was within a year or so of when he began wearing the cervical headgear, Mr. Lalani suffered from fatigue and was more irritable. He was hard to wake up in the morning, which led to his mother often having to drive him to school, and his sister being frustrated with him.
- [69] I also find that after his headgear treatment, Mr. Lalani's teeth were straighter and less crowded, and good alignment of his upper and lower dental arches had been achieved.

Longer Term: Undergrad to 2012

- [70] Mr. Lalani testified that when he started university in 1996, he missed all of his morning classes and was falling asleep in classes and the library. He testified that his grades were poor in his first semester but later improved. He attributed this improvement to having a more flexible schedule and the ability to take mostly afternoon classes, and not an improvement after the adjustment of leaving home and starting university. During and between his undergraduate studies and his master's degree, Mr. Lalani says that he excelled when he could get enough sleep in the mornings but was not functional with jobs and classes where he had to start earlier in the day.
- [71] When it was put to him that he could have started going to bed earlier, Mr. Lalani responded that it did not matter when he went to bed, he would still be exhausted in the morning, but alert and highly functional in the afternoon and evenings.
- [72] Mr. Lalani submits that, after his bachelor's degree he was unable to hold down a job or start a family due to his fatigue, chronic lateness in the mornings, and his need to sleep during morning working hours. This is generally supported by the testimony of his sister, who said that they both lived in California in Mr. Lalani's twenties, and she observed her brother's fatigue seem to worsen over time as he was often late for work and was fired from jobs. She recalls struggling to understand why, given his intelligence, Mr. Lalani could not hold down a job during this period.
- [73] Mr. Lalani went on, in his late twenties, to do a master's degree at McMaster University in a new program combining business and engineering, where he graduated at the top of his class. He was immediately hired by his department to mentor incoming students to the program in developing their own engineering-based business ventures. He also obtained a number of patents and developed a number of business ventures, and secured grants and investments into these projects.
- [74] In January 2008, while still employed by McMaster, Mr. Lalani secured a position at a venture capital firm, Trivaris Ltd., through which he was able to secure additional investment for some of the technologies he had developed during his master's degree. At Trivaris, Mr. Lalani testified that he was regularly late for work if he had to be in early, and he was found sleeping on the job.

- [75] Cindy Porter, who was the Director of Marketing at Trivaris and Mr. Lalani's former colleague, testified that when they worked together, Mr. Lalani always seemed tired and was frequently late for work. She found him to be unreliable with respect to the fulfilment of his work obligations, and that she had to pick up for his slack. She assumed he was staying up too late. She understood that senior management was going to speak to him about these issues, and that Mr. Lalani left not long after. Mr. Lalani was not fired from Trivaris, but Mr. Lalani believed that he had done poorly, and he left Trivaris of his own accord later that year. Mr. Lalani managed to keep a number of the venture capital projects he had been working on when he came into Trivaris, however, and he continued to seek regulatory approvals and investment for them.
- [76] In 2009, Mr. Lalani testified that he continued to struggle with morning fatigue and decided to move back to Vancouver to live with his parents. He continued to work on a number of the projects he had started at McMaster, but none of them panned out in a significant way or launched his career. He also started a number of other companies to develop other products, including a pharmaceutical company to explore the use of Ayurvedic herbs. He joined a technology firm called SpaceDox in Seattle, where he worked for "sweat equity". Towards the end of 2010, however, Mr. Lalani says his fatigue worsened, and he was unable to continue working there. The owner of SpaceDox, Richard Obendorf, testified that Mr. Lalani assisted in raising capital, was a hard worker, and "did what he said he would do", though he did not "micro-manage" him. Mr. Obendorf did not recall Mr. Lalani being fatigued or mentioning his fatigue, however.
- [77] In 2009, Mr. Lalani took a job as a tutor, which he continued for many years. In 2011, Mr. Lalani began working for Michael Goodman, whom he met when tutoring Mr. Goodman's son. Mr. Goodman took him on as his apprentice and protégé. Mr. Lalani currently works as a consultant for Mr. Goodman's group of companies, primarily on real estate matters, and he has risen to be the Vice President and now the President of one of Mr. Goodman's corporate ventures.
- [78] Mr. Goodman testified that Mr. Lalani gets his work done, thinks outside the box, and is a hard worker, but that there have been some problems, such as Mr. Lalani falling asleep in meetings. Mr. Goodman testified that he allows Mr. Lalani to work flexible hours and gives him "a lot of slack", but that if he was not so tenacious, he would not want an employee with such problems. Mr. Lalani, however, works hard and late into the night, and is clearly appreciated by Mr. Goodman.
- [79] Overall, in the longer term, the evidence establishes that Mr. Lalani suffered from daytime fatigue into his twenties and thirties, particularly in the mornings. I find that this often made him late for work or led to him falling asleep on the job if he was unable to sleep later in the morning. However, in more flexible school and work settings, he is highly productive in the afternoons and evenings, and has excelled at his work.

[80] I also accept Mr. Lalani's evidence that he was unable to change his body clock to fall asleep and wake up earlier feeling rested, even after he received medical advice to improve his "sleep hygiene". My overall impression of Mr. Lalani's own evidence is that his fatigue has had more to do with the timing of his sleep than the quantity of his sleep: the key factor between low and high productivity was whether he could sleep during the morning hours or not.

Did Mr. Lalani develop OSA, and if so, when?

[81] Mr. Lalani testified that in 2010, at the age of 32, he experienced a new sleep related symptom beyond fatigue: night sweats.

[82] Around that time, the Mr. Lalani's family doctor, Dr. Phan, referred him to Westcoast Sleep & Breathing Centre for an assessment of his sleeping problems. Dr. Dong evaluated Mr. Lalani and ordered an oximetry test, which showed normal oxygen levels in his blood when he slept, which is generally inconsistent with sleep apnea. Dr. Dong reported that there was no need for any further investigations into whether Mr. Lalani had sleep apnea at that time, and did not refer him to further testing.

[83] In his letter to Dr. Phan, Dr. Dong concluded that Mr. Lalani's difficulty in initiating sleep was likely arising from stress and inadequate sleep hygiene. Dr. Phan then advised Mr. Lalani that he did not have sleep apnea. Mr. Lalani's evidence was that the night sweats that initiated this inquiry ceased after a few weeks in any event, which he attributed to a change in his diet.

[84] Approximately two years later, Mr. Lalani testified that he woke up three mornings in a row struggling to move and experiencing a "different level" of fatigue. On cross-examination, he initially resisted defence counsel's characterization of this as a change in his symptoms, saying it was instead a worsening or progression, but later adopted his discovery evidence that this was a "drastic change", and agreed that he had never experienced symptoms like this before; his symptoms were orders of magnitude worse. He called his sister, a naturopath, who suggested to him that he may have sleep apnea. Mr. Lalani went to a different health provider, who gave him another oximetry test.

[85] On January 17, 2013, Mr. Lalani participated in a comprehensive sleep history and overnight oximetry evaluation. The initial assessment report following this evaluation recorded a severe number of oxygen desaturation events, far more than those recorded in 2010, and noted a nocturnal oximetry pattern described as highly suggestive of sleep disordered breathing. Based on this initial testing Mr. Lalani bought himself a second-hand CPAP machine on Craigslist.

[86] Dr. Surinder Janda reviewed the overnight oximetry and, in a letter to Dr. Phan dated March 1, 2013, suggested that Mr. Lalani may have "severe Obstructive Sleep Apnea/hypopnea syndrome", recommending a full polysomnography ("PSG") to confirm the diagnosis.

- [87] Mr. Lalani was also evaluated by Dr. Liem on February 25, 2013. Dr. Liem's subsequent consult letter to Dr. Phan states that Mr. Lalani presented with the "chief complaint of fatigue", along with several other complaints, most of which do not appear in the pre-2013 clinical records in evidence. Dr. Liem's letter goes on to state that "[f]unctional airway testing does not show a collapse of his airway" and "I suspect Mr. Lailani [sic] suffers from a sleep disorder (possible not OSA)". He also recommended a full PSG.
- [88] On April 3, 2013, Mr. Lalani attended Surrey Memorial Hospital for a diagnostic PSG. Shortly thereafter, on April 18, 2013, he was seen by an Ear, Nose, and Throat specialist ("ENT"), Dr. Richard Smyth. In a consult letter written to Dr. Janda, Dr. Smyth lists Mr. Lalani's diagnosis as: "Obstructive sleep apnea, likely severe, despite the PSG findings, relating to a Type 3 upper airway and nasal deformity". This is the first clinical record of such a diagnosis.
- [89] Dr. Smyth also notes, however, that "additional diagnoses such as narcolepsy or idiopathic hypersomnolence" remained possible.
- [90] In and around this time, Mr. Lalani also testified that he began experiencing terrible headaches which he described as cluster headaches. He associated these headaches with the use of his CPAP. There is little clinical or medical evidence of these headaches or their possible cause before me, but I accept that Mr. Lalani began to suffer terrible headaches at this time. Mr. Lalani also testified to feeling like he was choking while using the CPAP, and that both his headaches and the choking were ongoing until shortly before trial. The same is true of his morning fatigue.
- [91] Mr. Lalani was subsequently examined by another ENT, Dr. Zameel Dewji, on July 17, 2013. In a letter to Dr. Phan, Dr. Dewji observes that Mr. Lalani has a "moderately severe right septal deformity" as well as "a large base of tongue and lingual tonsils retrodisplacing his epiglottis".
- [92] Ten years later, in March 2023, at the request of Mr. Lalani, Dr. Dewji wrote to Dr. Phan stating that, based on his notes of the time, it was reasonable to state instead that Mr. Lalani "has a narrow retrolingual airway, with a displaced epiglottis". I do not consider that this 2023 letter was prepared in the ordinary course of business, but rather was specifically requested for the purposes of this litigation. As such, I do not consider that the 2023 requested change to Dr. Dewji's clinical record can properly be described as admissible for the truth of its contents as a business record. However, nothing in these Reasons turn on this discrepancy.
- [93] None of these clinical records are admissible at trial as expert evidence of a diagnosis of sleep apnea, due to obstruction or some other cause. The defendant argues that there is no such evidence. All of Mr. Lalani's experts were told to assume that he has obstructive sleep apnea in preparing their reports.

- [94] Mr. Lalani relies on the report of Dr. McCarty, who is a doctor of sleep medicine in the United States. While Dr. McCarty did not examine Mr. Lalani, he did review Mr. Lalani's PSG results, and in his oral evidence at trial he stated that he formed an independent opinion that Mr. Lalani likely has sleep apnea based on that data, in addition to being told to make that assumption. He suggests that this is the same preparation he would do if he was seeing a patient, though he did not say this review would replace his actual examination.
- [95] I have also reviewed Mr. Lalani's 2013 PSG report, and on its face, it indicates a number of apneas during Mr. Lalani's sleep, though the majority are not noted to be obstructive apneas. Dr. McCarty stated that his opinion that Mr. Lalani's sleep apnea is obstructive in nature was based, at least in part, on how completely Mr. Lalani responded to CPAP therapy. Dr. McCarty explained that diagnosing the cause of sleep apneas was "evidence-based", saying words to the effect of "we just poke sleep apnea with a stick to see what makes it better," to understand the anatomical nature of the apnea.
- [96] Unfortunately, Mr. Lalani's successful response to CPAP therapy is an assumption Dr. McCarty was told to make in his report, but it is not one made out on the evidence at trial. In the conclusion of his report, Dr. McCarty relies on this assumption, stating that "[Mr. Lalani's] excessive daytime somnolence symptomatically completely responded to [CPAP] therapy". However, this is not a factual conclusion supported by Mr. Lalani's testimony before me at trial. Instead, Mr. Lalani's evidence at trial indicates that he did not respond well to the CPAP therapy, that he suffered cluster headaches and choking when using the CPAP, and his daytime fatigue continued largely unabated even with the use of a CPAP until the fall of 2024 when he surgically implanted a brace of his own invention into his head.
- [97] It would have been preferable had Mr. Lalani submitted expert evidence of a doctor who had examined him and opined, for trial purposes, that he suffers from obstructive sleep apnea. Presumably Mr. Lalani's family physician, Dr. Phan, who provided an expert report on Mr. Lalani's tongue size but not on his diagnosis of OSA, should have been able to provide such an opinion, but did not.
- [98] Nevertheless, in the absence of evidence of this kind, I am prepared to assume that Mr. Lalani has OSA for the purposes of this claim. Although not admissible for its truth, Mr. Lalani has had a number of specialists record such a diagnosis and recommend treatments to him on the basis of this diagnosis. It appears from some of the clinical records that Dr. Phan has been involved in considering treatment options for this diagnosis. While Dr. Pliska raises a number of contra-indications in Mr. Lalani's 2013 clinical records and the PSG to a diagnosis of OSA, he does have the expertise to diagnose OSA, or to rule it out.
- [99] I find that the best evidence available to me, despite its significant limitations, is Dr. McCarty's evidence that Mr. Lalani's clinical history, and in particular the results of the PSG in 2013, supports a diagnosis of OSA. I therefore assume that Mr. Lalani does have OSA, or at least that he did until his symptoms of OSA resolved last year.

- [100] As to when Mr. Lalani developed OSA, Mr. Lalani has provided no medical expert evidence directly on point.
- [101] Mr. Lalani submits that although he was first diagnosed with OSA in 2013, I should infer that his OSA began at the time he started experiencing morning fatigue, almost immediately after beginning to wear the cervical headgear at the age of 12. I cannot accept this argument.
- [102] Prior to 2013, there are no clinical records that indicate a diagnosis of OSA, including specific testing for this condition in 2010.
- [103] Mr. Lalani testified that he experienced chronic fatigue since he was about 12 years old, with his first memory of having difficulty waking up in the morning being in the summer before he started grade seven, shortly after starting the use of his headgear. He did not think that this was a medical issue at that time, and his mother was told by their family doctor that this was normal.
- [104] Mr. Lalani and his mother both testified that fatigue and irritability were the only symptoms that Mr. Lalani exhibited at that time. Those were the only symptoms reported by Mr. Lalani up until 2010, at which point his medical records indicate he began to report additional symptoms such as night sweats, but oximetry testing contra-indicated OSA at that time.
- [105] Mr. Lalani has provided little expert opinion evidence regarding the nature of his fatigue and how it might relate to or be caused by OSA in particular (beyond Dr. McCarty's inaccurate assumption that Mr. Lalani's daytime fatigue was resolved by CPAP therapy). No expert considered Mr. Lalani's testimony that his CPAP caused choking and headaches, but was largely unsuccessful in addressing his daytime fatigue which remained largely unabated. I also have no medical evidence or even clinical records that consider Mr. Lalani's particular symptoms of being highly productive in the afternoon and late at night throughout his adolescence and adult life, but being unable to be awake or alert in the mornings, regardless of when he goes to bed. While fatigue may be a symptom of a sleep disorder like OSA (a fact that is not clearly established in the expert opinion evidence but which I am prepared to assume nevertheless), fatigue is not a symptom that is unique to OSA.
- [106] To the extent that Mr. Lalani relies on the information he received in 2013 that he has a narrower than average windpipe and deformed septal or nasal areas, I have no evidence of whether that has been a consistent feature for Mr. Lalani, before, during or after his two-year use of cervical headgear. I have no clinical or other evidence regarding the size of Mr. Lalani's airway or his deviated septum as a child, or through his adolescent years from 13 to 18, or in his post-adolescent years up until his mid-thirties.

- [107] Overall, while I accept that Mr. Lalani likely had OSA in 2013, despite the lack of any medical doctor who examined Mr. Lalani giving that evidence before me, I find that the evidence of Mr. Lalani's pattern of fatigue, and the clinical notes indicating that Mr. Lalani had a partially obstructed and narrow airway in 2013, is not sufficient to establish that he had OSA prior to 2013.
- [108] The best evidence I have before me as to when Mr. Lalani developed OSA is that, in 2013, his condition drastically changed, and his oximetry test results went from normal in 2010, to exhibiting a severe number of desaturation events in 2013.
- [109] This is also the time when, according to Mr. Lalani, he first thought about his headgear "bringing [his] upper jaw back" and began to "suspect something sinister" in this regard. He began devoting himself to researching OSA and its relationship to headgear. He then looked back at his adolescent and young adult history of feeling fatigued in the morning and reconsidered and recast that experience in light of the information he found.
- [110] Overall, I find that Mr. Lalani was diagnosed with OSA in 2013, and that it is more likely than not that he did have OSA at that time. However, the evidence as a whole, including both the evidence of Mr. Lalani's fatigue and Mr. Lalani's clinical records, does not establish that he had OSA any earlier than that. I find that Mr. Lalani has not proven on a balance of probabilities that he suffered from OSA prior to 2013.

What has Mr. Lalani been prescribed or recommended for his OSA?

- [111] As noted above, after being told in early 2013 that he might have OSA, Mr. Lalani purchased a CPAP machine on Craigslist, prior to being formally prescribed one. Shortly thereafter, following their assessments, both Dr. Janda and Dr. Phan recommended CPAP therapy to Mr. Lalani. Mr. Lalani did not proceed with obtaining a CPAP through a clinician at that time, explaining he lacked the insurance coverage for one. It is not clear if he ever obtained a clinically prescribed or calibrated CPAP.
- [112] Mr. Lalani submits that his ENT doctor, Dr. Dewji, advised him to have double jaw advancement surgery to open his airway in order to treat the OSA, and told him that while soft tissue surgeries would be of some benefit, the double jaw advancement surgery would be the best option. It is apparent from Dr. Dewji's letter to Dr. Phan dated July 17, 2013, a number of surgical options were recommended:

Further surgical options were discussed with Mr. Lalani today. An oral appliance will likely not benefit him greatly. As he is likely a severe apneic primary surgeries of nasal reconstruction and uvulopharyngopalatoplasty would be of some benefit. His inclination is towards doing as little surgery as possible for the best benefit. In that regard a maxillomandibular advancement would be a reasonable and appropriate option for him.

- [113] Dr. McCarty confirmed in cross-examination -- and I accept his evidence on this point as properly within his qualification -- that the "primary surgeries" referred to by Dr. Dewji, being nasal reconstruction and uvulopharyngopalatoplasty, are procedures intended to address soft tissue anomalies. The maxillomandibular advancement referred to by Dr. Dewji is the double jaw advancement surgery mentioned by Mr. Lalani.
- [114] Mr. Lalani says that double jaw advancement surgery is not a covered medical expense and would cost him \$50,000. He testified that Dr. Phan petitioned MSP to cover the surgery for him, but MSP declined to do so. It is also Mr. Lalani's evidence that, since his OSA diagnosis, he has flown all over the world and consulted with 10 to 15 different surgeons, all of which suggested different theories, problems, and solutions.
- [115] Mr. Lalani testified that he ultimately considered all the surgical options provided to be "too risky," including the soft tissue options for a deviated septum, and the double jaw advancement surgery.
- [116] Beyond the use of a CPAP, I find that Mr. Lalani has been prescribed many additional options for treatment from numerous physicians and surgeons, including treatments pertaining to his deviated septum and other soft-tissue oriented surgeries, as well as the recommended double jaw advancement surgery. He has declined to proceed with these surgical options.

What has Mr. Lalani done to address his diagnosis of OSA?

- [117] Despite much of his evidence at trial suggesting that his CPAP did not materially improve his chronic morning fatigue, Mr. Lalani argued in closing submissions that it was still of some assistance. On the evidence before me, I find that the use of his CPAP machine has been only somewhat helpful to his condition at best, and has created its own problems.
- [118] In addition to the use of his CPAP machine, the evidence establishes that in 2014, Mr. Lalani traveled to Australia to meet with Dr. da Cruz. Dr. da Cruz provided Mr. Lalani with a splint that was intended to make his CPAP more effective. Mr. Lalani testified that the splint assisted for some time, and his cluster headaches went away for a period. However, in 2015, the cluster headaches and fatigue returned.
- [119] In 2023, Mr. Lalani developed a leather harness that he wears to sleep, with buckles that hold him in place in bed, which he says prevents him from choking while using his CPAP machine.
- [120] In addition, after reading that CPAP machines can gradually push the upper jaw backwards and that the upper jaw bones are susceptible to such pressure, Mr. Lalani testified that he came up with the idea of advancing his upper jaw himself with a type of headgear of his own creation. He calls this device the "Reverse CHG Brace", and I will call it simply the "Brace".

- [121] In 2017, Mr. Lalani began developing his Brace, which he demonstrated during his evidence in chief. The Brace looks like an exaggerated safety cage protruding several inches in front of Mr. Lalani's face, with wires attaching to a retainer that he places in his mouth. Unable to find a surgeon willing to do so, Mr. Lalani operated on himself -- using a camera, mirrors and a helmet created from a 3D model of his head -- and drilled three 4mm holes into the back of his head to secure the Brace. He explained that he was then able to screw the Brace onto the back of his head, allowing the front cage to project beyond his face and pull the retainer in his mouth forward.
- [122] Mr. Lalani testified that he wore the Brace for 16 hours a day for two weeks in the fall of 2024, turning the screws 1/8th of a millimetre each day to increase the tension on his upper palate. Pointing to photographs and CT scans from before and after the use of the Brace, Mr. Lalani submits that his device has pulled the upper palate of his mouth forward and increased the size of his airway.
- [123] Mr. Lalani testified that the use of this Brace has "greatly resolved" his OSA, to the point where he is now free of cluster headaches, has a regular sleep cycle, is able to wake up early, and feels refreshed throughout the day without needing naps. He further confirmed in cross-examination that he generally feels "orders of magnitude better" and is now able to be active again, doing a mix of yoga, cardio, and resistance training on a regular basis.
- [124] Dr. Phan also testified as a lay witness to his observations of Mr. Lalani after he used the Brace last fall. In this capacity, Dr. Phan testified that in November 2024, Mr. Lalani's Apnea-Hypoapnea Index, a test for OSA severity, came down from a moderate-to-severe rating of 23, to a rating of 6, which is very close to the mild range. He further testified that Mr. Lalani has stopped complaining of cluster headaches since using the Brace and that Mr. Lalani appears "brighter and more alert".
- [125] This is not expert opinion evidence as to the effectiveness of the Brace, and other than Mr. Lalani's own expert report (which I found to be inadmissible) there is no expert evidence before the Court that is capable of establishing the safety and effectiveness of the Brace. However, I do accept Mr. Lalani's direct evidence of his experience that the Brace has been very successful in treating his fatigue and headaches, to the point that he considers himself to be largely cured.

LIABILITY

Expert Evidence

- [126] It is well-established that establishing medical malpractice at law requires expert evidence on issues such as the standard of care at the time of the treatment. Where causation is a matter of scientific or medical theory, expert evidence is also required to establish causation, and that is particularly so here where what was known about causation in 1989 is also at issue.

- [127] As noted above, Mr. Lalani tendered six reports prepared by five experts at trial, including that of an orthodontist, a dental surgeon, a dentist, a sleep doctor and his family doctor. The defendant tendered the opinion of Dr. Pliska, a Vancouver-based orthodontist and professor of orthodontics at the University of British Columbia.
- [128] Of the many experts enlisted by the plaintiff, none are Canadian medical or dental practitioners, aside from his family doctor, Dr. Phan. This factor alone does not render the evidence inadmissible, but it is a consideration that goes to the weight afforded to it: *Chen v. Ross*, 2012 BCSC 1605 at paras. 46-53.
- [129] Of the expert evidence led by Mr. Lalani, only Dr. Hang was a specialist in orthodontics. While an opinion of a medical professional with a more divergent practice profile is admissible, there is a danger in attributing undue weight to it: *Lotocky et al v. Markle et al*, 2006 BCSC 1295 at paras. 127-129. This was particularly true for the evidence of Dr. da Cruz and Dr. Coren with respect to the key issues of the standard of care of an orthodontist and informed consent.
- [130] All of Mr. Lalani's medical experts were provided with a common set of assumptions by Mr. Lalani. Some of those assumptions were established in evidence. However, some of these factual assumptions were not supported or established by the evidence at trial, including that:
- a) Dr. Lear told him he had an "overgrown upper jaw" in 1989 and the cervical headgear was meant to treat this. For the reasons stated above, I found that this assertion is not supported by the evidence at trial;
 - b) Mr. Lalani wore the cervical headgear while sleeping and during the day for two years. The underlined portion of this assumption was not established by the evidence and contradicts Mr. Lalani's evidence at trial;
 - c) In 2013 Mr. Lalani was diagnosed with OSA "due to retropositioned jaws" and soft tissues. The 2013 clinical records do not mention Mr. Lalani's jaw position or that it has been displaced, but do mention soft tissue factors such as his "septal deformity" and "lingual tonsils retrodisplacing his epiglottis." Perhaps Mr. Lalani is relying upon the fact that jaw advancement surgery is one of the recommended options provided by several of these doctors (as are various soft-tissue surgical options). This logical leap between treatment recommendations and causation is common in the plaintiff's case, but it is not an accurate statement of facts established in the clinical records; and
 - d) Mr. Lalani's OSA has been successfully treated by a CPAP machine. I have set out the problematic nature of this assumption above.
- [131] In addition to these factual assumptions that were not made out at trial, Mr. Lalani instructed his experts to assume several facts that require expert opinion to prove, including that:

- a) At the time of Mr. Lalani's treatment, cervical headgear was known in the published literature to cause reverse growth patterns in both jaws;
- b) At the time of treatment, reverse growth patterns of both jaws were clinically associated with moderate to severe OSA; and
- c) Mr. Lalani was correctly diagnosed with OSA in 2013, and his OSA symptoms began when he was 11 shortly after the commencement of his orthodontic treatment.

[132] The above assumptions go to the heart of Mr. Lalani's case. To prove these assertions, Mr. Lalani requires expert opinion evidence that does not assume these facts. I accept that it is possible, were Mr. Lalani's tendered experts to clearly set out when they were relying on these assumptions and when they were not, to accept opinion on the above issues despite these stated assumptions. However, as will be apparent as I review the reports and cross-examination evidence, such distinctions were rarely apparent in the reports tendered by Mr. Lalani. Indeed, it is not always apparent what words and opinions expressed in these reports are the words of the qualified expert, and which are the words of Mr. Lalani, or another expert in the area.

Dr. Phan

- [133] Dr. Phan was qualified as a medical doctor with a specialization in family medicine and able to give this Court evidence within that practice. He has been Mr. Lalani's family doctor for 25 years.
- [134] In his brief expert report, Dr. Phan opined that Mr. Lalani has a normal-sized tongue, with reference to MRI results dated February 28, 2023. The genesis of this expert report, as explained by Dr. Phan in cross-examination, was that Mr. Lalani had requested Dr. Phan to ask another doctor, Dr. Dewji, to change his 2013 clinical record on the basis of a new MRI taken on December 15, 2020. Dr. Dewji's original record stated Mr. Lalani had a "large base of tongue"; Mr. Lalani wanted it to instead say his tongue size was normal. When Dr. Dewji refused to do so, Mr. Lalani asked Dr. Phan to write a report on the matter.
- [135] I agree with the defendant that, at best, Dr. Phan's opinions relate to Mr. Lalani's tongue size in 2023 and have little relevance to the relative size of his tongue as it was in 2013 when assessed by Dr. Dewji, or Dr. Dewji's recorded comments in this regard. Dr. Phan's report is therefore of limited assistance to the Court, particularly in the absence of any expert opinion evidence as to what I am to make of this 2020 measurement.
- [136] I note that Dr. Phan also testified as a lay witness with respect to his observations regarding the Brace developed by Mr. Lalani. I did not allow, and do not consider, opinion evidence not contained in Dr. Phan's report regarding the interpretation of Mr. Lalani's testing results that Mr. Lalani himself commissioned to prove the efficacy of his Brace.

- [137] Dr. Phan was not asked to, and did not, provide any expert evidence or lay witness evidence regarding Mr. Lalani's history of fatigue or his reported diagnosis of OSA.

Dr. Hang

- [138] Dr. Hang was qualified as an expert in clinical orthodontics. He tendered two reports, one initial report and one in reply to Dr. Pliska. As tendered, his report is relevant to the issue of informed consent and causation. It also has relevance to the orthodontic standard of care in 1989.
- [139] His reports contain his opinions with respect to the history of the orthodontic industry and competing schools of thought; the biomechanics of cervical headgear; whether retractive orthodontics can cause OSA; what informed consent should involve in relation to cervical headgear in 1989; and the standard of care in orthodontics in 1989. Dr. Hang did not examine Mr. Lalani clinically and was not provided with his complete history.
- [140] Dr. Hang has been a member of the American Association of Orthodontists (the "AAO") since 1972, obtained his masters in orthodontics in 1974, and both taught and practiced as an orthodontist since 1975 in the United States. For the first decade of his practice, he taught and practiced what he considered traditional orthodontics, including retraction (headgear) and extraction (pulling teeth). However, during the 1980s, he came to question the cosmetic value of these practices, and in the 1990s he set up an alternative practice in California, where he was considered, as he put it, "the rebel." Since then, he has been a vocal advocate within his profession against retractions and extractions, and for an alternative approach sometimes referred to at trial as "orthotropics" or "expansion orthodontics."
- [141] It was not until 1992 that Dr. Hang came to question whether the extractions and retractions taught and practiced by orthodontists might also have some effect on airways. He now believes that they do, and that is a central focus of his opposition to traditional orthodontic practices.
- [142] He views traditional orthodontic techniques as ineffective at their primarily cosmetic purposes. He is also of the view that restricting the forward growth of the upper jaw through the use of headgear has the effect of moving the entire structure of the upper mouth and both jaws backwards, and therefore may compromise the patient's upper airway and respiratory function. He has expressed the view publicly that retraction should be "illegal."
- [143] Dr. Hang's report is primarily concerned with the impact of retractions on patients' airways. Although his report references Mr. Lalani's case in particular, it does so with limited specificity, and the focus of his report is a broader exploration of how retractions result in poorer cosmetic profiles for patients and can impact their airways more generally. Dr. Hang's report does not mention any of Mr. Lalani's other complaints which were plead but were not the focus of trial evidence. Nor does Dr. Hang offer any opinion that Dr. Lear

committed any negligent act or omission in the installation or tuning of Mr. Lalani's headgear. Dr. Hang's concern is related entirely to the choice of Dr. Lear, and mainstream orthodontists generally, to use retractive techniques, including cervical headgear, on patients like Mr. Lalani.

- [144] At the same time, Dr. Hang easily acknowledged in cross-examination that his opinions on orthodontic treatment are not in keeping with the mainstream of the profession and have not been since he rejected traditional orthodontics. He described some early advocates in his profession for the approach he now advocates to be "diametrically opposite" from most orthodontists, who "absolutely" did not accept this alternative perspective or "school of thought". As a result of his own change of heart, he himself has been largely ostracized by the profession, and he continues to be active in trying to change the profession, including in his retirement.
- [145] Challenged in cross-examination that traditional orthodontic treatments have not been shown to cause or increase the likelihood of OSA, he agreed that there has been no random controlled trial to establish this causal link, but he strongly believes it to be true. When it was suggested that the "consensus view" of the majority of the orthodontic profession is that there is no causal connection, he agreed, but said that is "very sad". He equated the orthodontic profession to "big tobacco". He compared the AAO to the fox guarding the henhouse.
- [146] Mr. Lalani submits that Dr. Hang is a credible expert because he "gives a fair and balanced view of retractive orthodontic treatment" by highlighting potential harms, and in doing so has "nothing to gain". He says that Dr. Hang's efforts to stop retraction should not be considered advocacy, but rather a "health care practitioner doing the right thing".
- [147] I found Dr. Hang to be a thoughtful, well-spoken and educated advocate for an alternative approach to mainstream orthodontics that rejects the use of cervical headgear and all forms of retraction.
- [148] Regardless of Dr. Hang's motivations, which I find were sincere and rooted in concerns about his profession and public health, it became clear in cross-examination that the majority of Dr. Hang's two reports were drafted by Mr. Lalani, including the many excerpts from journal articles and the creation and insertion of explanatory diagrams and images.
- [149] Dr. Hang admitted on cross-examination that Mr. Lalani prepared the literature review and excerpts that makes up the bulk of his reports, including the provision of key quotes from the literature used to substantiate his opinions throughout his expert reports. Mr. Lalani also created and inserted key images and a diagram that was not taken from a scientific or other journal. Dr. Hang's evidence in this regard was that he read what Mr. Lalani prepared for him, he agreed with it and he "plugged in" his own comments.

- [150] On their face, Dr. Hang's reports rely substantially on Mr. Lalani's literature review and the quotes and images provided by Mr. Lalani. His second report in particular is made up almost entirely of such excerpts, but with some larger blue italicized comments interspersed stating "Dr. Hang's comment: " followed by one to three sentences, often in the nature of argument.
- [151] Mr. Lalani acknowledges that this may detract slightly from the weight to be given to Dr. Hang's report, but says that, because Dr. Hang adopted and signed the report and tendered it as his own, the report is still entitled to considerable weight.
- [152] I cannot agree.
- [153] If one is to disregard Mr. Lalani's contributions to Dr. Hang's reports in the form of the excerpts from various literature sources and studies, and diagrams and images, Dr. Hang's contribution to the reports consists of statements of bare opinion, and at times, impermissible argument. While I accept that Dr. Hang's opinion is likely rooted in his own extensive experience, it does not carry the weight of an opinion that is based on any broader orthodontic research, knowledge, or experience.
- [154] Dr. Hang's evidence in cross-examination was clearly driven by his perspective on mainstream orthodontics, and he occasionally became argumentative in this regard due to his passion on this topic, but at least it was unscripted by Mr. Lalani. When he avoided argument, I found Dr. Hang's oral evidence in cross-examination at trial somewhat more helpful to the Court than the reports he signed.

Dr. Coren

- [155] Dr. Coren was qualified as an oral surgeon who has experience in treating patients surgically, many of whom he says had previously been treated with retraction and extraction orthodontics. He worked for many years in a team with an ENT doctor and an "expansion" orthodontist, Dr. Mahoney, who advocated against the use of traditional orthodontic retraction methods in Australia. Dr. Coren would provide surgical solutions to this team, generally to advance the lower jaw and chin, such as through double jaw advancement surgeries.
- [156] On diagnostic issues relating to airways, Dr. Coren agreed he would defer to an ENT, and on orthodontic issues, he relies on an orthodontist. He relied on both an ENT and Dr. Mahoney in preparing his opinions for his report in this case.
- [157] His report, as tendered, is relevant primarily to the issue of causation of harms from cervical headgear that he has expertise to diagnose to the extent that they relate to his area of expertise. He does not have expertise as an orthodontist, and he is not qualified to opine on the orthodontic standard of care in British Columbia.

- [158] Dr. Coren retired from regular practice in 2008, and since then has worked largely as a "medico-legal consultant." He was involved in litigation in Australia regarding the dangers of traditional orthodontics, which he also refers to as "retraction orthodontics". In his report, he talks about patients being "mutilated" by retraction orthodontics, and he equated traditional orthodontics to the gun lobby in the United States. I found Dr. Coren to be unabashedly partisan and argumentative.
- [159] Mr. Lalani argues that Dr. Coren is a credible witness for much the same reasons as Dr. Hang, noting that he "understands orthodontic retraction is a negligent standard and he rejects it". It is Dr. Coren's opinion that cervical headgear should not be used at all, and that he would be "surprised" if the use of headgear was not automatically correlated with breathing problems.
- [160] In his report, he reviews casual photographs of Mr. Lalani, as well as x-ray imaging from Dr. Lear's files, as well as more recent imaging provided by Mr. Lalani, and opines on a number of issues, including that they show Mr. Lalani having gross alveolar bone loss in 1995 caused by "orthodontic forces" and a "narrowed naso-oral-pharyngeal airway space/shadow" on a 2014 CT scan. Dr. Coren conceded in cross examination that he consulted with an ENT and a doctor in forming these opinions as they are not within his expertise.
- [161] Among the images Dr. Coren relied upon in forming his opinions, was a 2013 profile photograph provided by Mr. Lalani in which Mr. Lalani appears to be pulling his neck and chin inward. As noted in Dr. Pliska's report, this photograph suggests a very different facial profile, including a receding chin and lower jaw, than the profile photograph of Mr. Lalani taken under standardized clinical conditions that same year in the office of Dr. Douglas, which shows a more prominent jaw and chin. I find that Dr. Coren's opinions based on this misleading photograph of Mr. Lalani's profile for clinical purposes undermines many of Dr. Coren's opinions in this respect.
- [162] Dr. Coren acknowledged in cross-examination that his report was based on literature provided to him by Mr. Lalani and on what Mr. Lalani told him, and that he and Mr. Lalani had worked together to draft his report.
- [163] Dr. Coren agreed that he was highly motivated to help Mr. Lalani win his case in an effort to achieve a worldwide ban on headgear and orthodontic retraction techniques more broadly. He suggested in his correspondence with Mr. Lalani that if Mr. Lalani was successful in this litigation, that would put a chill on orthodontists being able to obtain insurance, which would achieve that ban more effectively than through legislation.
- [164] Dr. Coren also emailed Mr. Lalani with extensive advice regarding the advancement of his litigation, including providing feedback and advice on his legal pleadings, advising Mr. Lalani of how to behave in court, and coaching him on the taking of photographs in conformity with clinical standards. He suggested, without basis, that Dr. Lear's loss of some of Mr. Lalani's file due to flooding more than 20 years post-treatment was "suspicious." He also connected Mr. Lalani with "like-minded" medical practitioners who might prepare

reports without charge, to help Mr. Lalani to build his case, and recommended the names of specific individuals that in his view would fit those criteria.

- [165] I find the involvement of Mr. Lalani in the drafting of the Dr. Coren's report, and the lack of independence from the pursuit of Mr. Lalani's legal case, significantly undermines the opinions expressed in his report. In addition to Mr. Lalani's uncredited contributions to the report, Dr. Coren also relied on the expertise of an orthodontist and ENT who did not prepare or sign Dr. Coren's report, and whose contributions were not clearly indicated, and who were not before the Court for cross-examination.
- [166] It is not possible for me to distinguish what facts or opinions expressed in Dr. Coren's report rely on Mr. Lalani's research, the unsupported factual assumptions and images provided by Mr. Lalani, the opinions of Dr. Coren's colleagues, and those of Dr. Coren based on his own expertise as a dental surgeon. I also find that most of the report strays into opinion evidence beyond Dr. Coren's qualified expertise in this Court.
- [167] Dr. Coren is clearly a passionate advocate, but he is not an impartial expert.
- [168] Overall, I find that I am unable rely on the opinions expressed in Dr. Coren's report for each of the reasons above.

Dr. da Cruz

- [169] Dr. da Cruz was qualified as a dentist able to give expert evidence in the general area of dentistry, including the reading of dentistry-related imagery. Although Dr. da Cruz considers himself a "holistic" dentist, with expertise in neurology and orthodontics, he is only qualified in Australia to practice dentistry, and that is the limit of his qualifications I found for the purposes of providing his expert opinion to this Court.
- [170] Mr. Lalani argues that Dr. da Cruz is a credible expert witness for similar reasons as Dr. Hang and Dr. Coren. He says that Dr. da Cruz opines on informed consent and how the structures of the skull are affected by cervical headgear, and "shows what the profession should do".
- [171] Dr. da Cruz treated Mr. Lalani for two weeks in 2015, but little in his report relates to that treatment or relies on that examination. He did not examine Mr. Lalani for the purposes of preparing his report.
- [172] It is Dr. da Cruz's expressed opinion that the cervical headgear administered by Dr. Lear contributed to Mr. Lalani's OSA by limiting the growth of his upper airway. However, Dr. da Cruz accepted on cross-examination that he has no knowledge of the size of Mr. Lalani's airway prior to the use of the cervical headgear. Dr. da Cruz instead relied on the same misleading 2013 profile photograph of Mr. Lalani relied upon by Dr. Coren, and other family photographs selected by Mr. Lalani to advance his claim. Dr. da Cruz's willingness to draw diagnostic and causal conclusions from such evidence causes me significant concerns about the reliability of his opinions.

- [173] Dr. da Cruz is a dentist, not a doctor or an orthodontist. Dr. da Cruz's report extends far beyond the confines of his qualified expertise, not only into orthodontics, but also into areas of neurology, vascular medicine, orthopedics, respirology, and radiology. His lack of qualifications in these areas, which occupy a great deal of his report, renders those portions of his report of no assistance to this Court.
- [174] As is the case with the reports of Dr. Hang and Dr. Coren, Mr. Lalani also participated in writing and revising Dr. da Cruz's expert report and provided Dr. da Cruz with the citations to the academic literature referenced therein. At one point during his cross-examination, Mr. Lalani was so concerned that Dr. da Cruz would be unfamiliar with one of the journal articles cited in his report, that Mr. Lalani objected to counsel asking Dr. da Cruz if the article was authoritative. In response to being asked about Mr. Lalani sending him the final draft of the report, Dr. da Cruz responded with words to the effect of "yes, but I would only sign if I have read it."
- [175] Ultimately, I find that the majority of Dr. da Cruz's report contains opinion well outside his qualification as a dentist. Of those portions of his opinion that might be properly qualified, I am unable to determine where Mr. Lalani's contributions and opinion to this report began or ended. I find that he has also relied upon unproven factual assumptions and inaccurate information in forming his opinions. As a result, I am unable to accord any weight to the report or opinion evidence of Dr. da Cruz.

Dr. McCarty

- [176] Dr. McCarty was qualified as a medical doctor with expertise in sleep medicine and sleep apnea in particular. His qualifications and experience are based in the United States. He currently owns his own consulting company focused on education of the general public through publications and a podcast on sleep apnea.
- [177] In admitting his report on voir dire, I noted that it contains a significant amount of argument and unqualified opinion; however, it also contains essential evidence to Mr. Lalani's case. Dr. McCarty is the only expert before me qualified to opine on whether Mr. Lalani has OSA. I have accepted this opinion, despite the limitations I noted above with respect to this evidence, and despite the fact that Dr. McCarty did not perform any examination of Mr. Lalani himself.
- [178] Dr. McCarty's report is wide ranging. In terms of the legal issues before me, it contains opinion evidence on the history of what he calls the retractionist and expansionist "schools of thought" in orthodontics, for which he turns to anthropological publications as well as orthodontic publications going back as far as 1953 and up to the last decade. While Dr. McCarty is not an orthodontist or an anthropologist, he indicates that this has been a subject of academic and professional interest for him as a sleep medicine doctor.

- [179] Dr. McCarty ultimately opines that, in his view, cervical headgear has the potential to cause sleep apnea, and he opines that it did so in Mr. Lalani's case.
- [180] Dr. McCarty was also asked by Mr. Lalani in direct examination for some opinions that were not contained in his expert report. I have disregarded those opinions.
- [181] Refreshingly, Mr. Lalani does not appear to have drafted Dr. McCarty's expert report, although Dr. McCarty indicated in cross-examination that he also relied upon some of Mr. Lalani's provided citations and research. Instead, Dr. McCarty's report reads like a polemic. Much of it is inadmissible argument.
- [182] The following extract of Dr. McCarty's report is illustrative of Dr. McCarty's overall opinion and his expression of it:

Dr. Pliska claims in his report, in defence of [cervical headgear], that it is the current "standard of care" in the field. I am hopeful that this report assist the court in assessing what should constitute knowledge that contributes to a "standard of care". Traditionally, the medical standard of care involves oversight by a third party (i.e.: the FDA, or Health Canada) who (arguably) is working on behalf of individual patient and public safety. Regular patient safety data monitoring is obligatory. Safety is ultimately judged by the standards of Evidence-Based Medicine, as popularized by Sackett et al, with all parties participating with the cooperative understanding that the right scientific tools need to be employed.

A treatment standard that's overseen without a purposeful and consistent method for using the right tools to evaluate for harms does not represent a "standard of care", at least, not as I understand it. From what I've seen, this is what is happening within the Retractive orthodontics community as part of a self-regulated healthcare industry. Instead of a "standard of care" I'd say this is more consistent with an "industry standard", which is to say "this is how we do things" and therefore represents circular logic for a demonstration of clinical acceptability, and certainly not something one should equate to a "standard of care". I believe the self-regulation is a strong contributor to this conflict of interest over which there is no oversight.

In my view, the Retractive school of thought has not properly demonstrated that [cervical headgear] carries a favorable risk-benefit ratio, or, at the very least, that patients have not been provided with the information necessary for them to make an informed determination as to what is (or is not) an acceptable risk versus benefit for this treatment option. The cosmetic benefit of straightening teeth quickly and establishing Class I occlusion does not (in my opinion) justify the risk (however small) of making the airway functionally more problematic, particularly if other strategies for achieving a cosmetically-satisfying result--that don't involve this risk--are available, and especially if self-correction is a part of normal growth, as we saw earlier.

- [183] While Dr. McCarty agrees that he did share a draft of his report with an orthodontist friend of his, and he incorporated some of his friend's comments, he testified that he only incorporated those suggestions where he personally agreed with them, and this can be seen by reviewing his disclosed drafts. His orthodontist friend did not share Dr. McCarty's

opinion on fundamental issues regarding the orthodontic standard of care and causation, and those views were not incorporated. I accept Dr. McCarty's explanation in cross-examination that he incorporated his orthodontist friend's suggestions that he agreed with, but not those he did not agree with. However, to the extent that Dr. McCarty is largely opining on matters of orthodontics that are, at best, peripheral to his expertise as a sleep medicine doctor, his reliance upon, and rejection of, the views of his orthodontist friend is problematic. Some of these opinions are reflected in the report tendered at trial.

- [184] Dr. McCarty's report consists largely of an historical treatise about what he considers to be "two schools of thought" in orthodontics, and the reasons he advocates for the adoption of the expansionist approach to orthodontic treatment over the retraction approach as the more cautious approach going forward. In doing so, he strays into areas that are not within his core expertise as a medical doctor with expertise in sleep medicine. For example, Dr. McCarty makes assertions about the "gonial angle" and the "oral vault" and jaw movements that appear to draw more on orthodontic expertise than his own medical expertise.
- [185] Dr. McCarty recognizes that studies that conform to modern standards do not establish a statistically meaningful correlation between the use of headgear and effects on the airway. However, he argues that we should not rely on statistical significance, and instead should view these studies as a "signal for harm" and that more study is needed.
- [186] I find that Dr. McCarty's report and testimony is more philosophical than factual and often strays well beyond his core expertise. I find I cannot rely on Dr. McCarty's opinions with respect to the standard of care of orthodontists or informed consent to the use of headgear in 1989, and that those topics are not within his qualified expertise before this Court.
- [187] It is only his causation analysis with respect to Mr. Lalani's OSA, set out on the last two pages of his lengthy report, that fall within Dr. McCarty's qualifications and are relevant to an issue before me in this litigation. I will discuss the weight I am able to give Dr. McCarty's causation opinion below when I discuss causation.

Dr. Pliska

- [188] The defendant's expert witness, Dr. Pliska, was qualified as an expert in orthodontics, dentofacial orthopedics and related aspects of sleep medicine, and qualified to give expert evidence on the assessment, diagnosis and treatment of orthodontic conditions, and on the assessment (but not diagnosis) of related sleep disordered breathing syndromes. In addition to an active orthodontic practice in BC, he teaches orthodontics at the University of British Columbia and researches and publishes in the area of orthodontics and sleep disordered breathing, and their interrelationship.

- [189] Dr. Pliska is an active member of the AAO, and was one of several authors of Obstructive Sleep Apnea and Orthodontics: An American Association of Orthodontists White Paper prepared by the AAO between 2017-2019 (the "White Paper"). The stated purpose of the White Paper was to review available research and literature and provide a definitive statement for the profession on the purported relationship between cervical headgear and OSA.
- [190] Dr. Pliska produced three expert reports in this litigation. The first opined on the purpose and effect of orthodontic treatment using cervical headgear; whether such treatment causes OSA; whether cervical headgear was regularly used by Canadian orthodontic practitioners in 1989; whether it was part of the standard of care of orthodontists to warn of specific risks of such treatment pertaining to OSA or airway changes; the result of the treatment provided to Mr. Lalani; and potential factors causing his alleged OSA, and the impact of cervical headgear treatment on such factors.
- [191] Dr. Pliska also provided two reply reports to expert reports served by Mr. Lalani. Mr. Lalani did not rely on a number of those reports at trial, and I severed from Dr. Pliska's reports his response to those untendered reports.
- [192] Mr. Lalani argued that Dr. Pliska failed to provide a "fair and balanced view of the issues", instead "defending a retraction standard which is negligent, so [his evidence] should not be given any weight". While I understand that this is Mr. Lalani's position with respect to the practice of orthodontics generally, in a tort action, the opinions of a properly qualified expert such as Dr. Pliska cannot be disregarded on the basis that he expresses the majority viewpoint in the profession.
- [193] I found Dr. Pliska's oral evidence in cross-examination to be thoughtful and open-minded, even in the face of a cross-examination over the course of almost two days which went substantially beyond the bounds of what he might have expected based on the contents of his report. While Mr. Lalani tends to characterize the experts before the Court as either pro- or anti- retraction and seeks to cast Dr. Pliska in the "opposing" camp, I did not find Dr. Pliska's cross-examination evidence to be oppositional or firmly in any particular "camp". He often conceded possibilities posed by Mr. Lalani which did not hew to a particular position in this litigation.
- [194] Despite such reasonable concessions, Dr. Pliska's evidence in cross-examination did not alter the integrity of the opinions set out in his reports.
- [195] Moreover, Dr. Pliska has current comprehensive clinical, research and teaching experience, particularly regarding the interrelationship between orthodontic treatment and OSA, that in my view exceeds that of Mr. Lalani's experts. He is also the only expert on liability issues familiar with the standards and knowledge of the orthodontic profession within British Columbia.

- [196] I note, however, that Dr. Pliska is qualified only in the assessment, but not the diagnosis, of related sleep disordered breathing syndromes. He is not qualified as a medical doctor with expertise in sleep medicine. He did not examine Mr. Lalani. In light of these limitations, while I accept Dr. Pliska is qualified to give evidence on potential factors that may contribute to OSA, and the impact of cervical headgear treatment on such factors, I do not rely on his evidence regarding Mr. Lalani's OSA diagnosis in particular.
- [197] With this one exception, I accept and rely on the evidence of Dr. Pliska as authoritative in the areas in which he is duly qualified. Where Dr. Pliska's evidence differs from that of the other liability experts, I prefer the evidence of Dr. Pliska.

What was the orthodontic standard of care in 1989 relating to headgear?

- [198] There is no dispute in this case that the defendant owed Mr. Lalani a duty of care. The first question is therefore: what was the requisite standard of care of an orthodontist with respect to the use of cervical headgear at the time Mr. Lalani received his headgear in 1989? More specifically for the purposes of this claim, was the use cervical headgear to treat buck teeth or Class II malocclusion consistent with the orthodontic standard of care in 1989?
- [199] Mr. Lalani, relying on the case of *Kangas v. Parker*, [1978] 5 W.W.R. 667, 1978 CanLII 1814 (S.K.C.A.), also argues that Dr. Lear owed a duty, throughout the entirety of the time in which he wore cervical headgear, to ensure that Mr. Lalani's upper airway was functional because Mr. Lear was knowingly modifying his airway through the use of cervical headgear. I understand Mr. Lalani to be arguing that the standard of care of an orthodontist in 1989 included the monitoring of his airway before and during his treatment with cervical headgear.
- [200] The Supreme Court of Canada in *ter Neuzen v. Korn*, [1995] 3 S.C.R. 674, 1995 CanLII 72, described the standard of care of doctors as follows:
- [33] It is well settled that physicians have a duty to conduct their practice in accordance with the conduct of a prudent and diligent doctor in the same circumstances. In the case of a specialist, such as a gynaecologist and obstetrician, the doctor's behaviour must be assessed in light of the conduct of other ordinary specialists, who possess a reasonable level of knowledge, competence and skill expected of professionals in Canada, in that field.
- [201] Physicians will not be found liable if the treatment given corresponds to recognized medical science at the time, even if there are competing theories: *ter Neuzen* at para. 38, citing *Lapointe v. Hôpital Le Gardeur*, [1992] 1 S.C.R. 351 at 363-364, 1992 CanLII 119.
- [202] The test for determining whether there was a breach of the standard of care is not whether something better or different should or could have been done, but whether the doctor failed to measure up to the standards of their profession: *Brimacombe v. Mathews*, 2001 BCCA 206 at paras. 77, 80; *Wilson v. Swanson*, [1956] S.C.R. 804, 1956 CanLII 1. A medical practitioner will not be liable for improper diagnosis or treatment resulting from a mere error in judgment, provided they exercised the knowledge, skill and judgment of the

average of their group of physicians when considering the case: Wilson at 812.

[203] Where clinical judgment is exercised, it must be based on information that is as complete as reasonably available in the circumstances, including tests or consultations that should be carried out: Campbell v. Roberts, 2014 ONSC 5922 at para. 100.

[204] Related to the scope of clinical judgment is that there will be cases where two reasonable physicians, acting reasonably, may disagree as to a course of action and diagnosis. Thus, as summarized by Chief Justice Hinkson in O'Connor v. Wambera, 2018 BCSC 886:

[50] To support the finding of a breach of the required standard of care, a physician must be guilty of such failure that no other physician with ordinary skill acting with ordinary care would be guilty of. It is not enough for there to be a difference in the opinion of other similarly trained specialists regarding diagnosis. A reasonable physician may differ from another reasonable physician regarding diagnosis; see Belknap v. Meakes, [1989] B.C.J. No. 2187 (C.A.).

[205] Medical professionals must be judged in the light of the knowledge that ought to have been reasonably possessed at the time of the alleged act of negligence. In ter Neuzen, Justice Sopinka provided this caution:

[34] It is also particularly important to emphasize, in the context of this case, that the conduct of physicians must be judged in the light of the knowledge that ought to have been reasonably possessed at the time of the alleged act of negligence. As Denning L.J. eloquently stated in Roe v. Ministry of Health, [1954] 2 All E.R. 131 (C.A.), at p. 137, "[w]e must not look at the 1947 accident with 1954 spectacles". That is, courts must not, with the benefit of hindsight, judge too harshly doctors who act in accordance with prevailing standards of professional knowledge.

[Emphasis added.]

[206] In Lapointe, Justice L'Heureux-Dube made the following comments which I consider apposite in the case before me:

Given the number of available methods of treatment from which medical professionals must at times choose, and the distinction between error and fault, a doctor will not be found liable if the diagnosis and treatment given to a patient correspond to those recognized by medical science at the time, even in the face of competing theories. As expressed more eloquently by André Nadeau in "La responsabilité médicale" (1946), 6 R. du B. 153 at p. 155:

[TRANSLATION] The courts do not have jurisdiction to settle scientific disputes or to choose among divergent opinions of physicians on certain subjects. They may only make a finding of fault where a violation of universally accepted rules of medicine has occurred. The courts should not involve themselves in controversial questions of assessment having to do with diagnosis or the treatment of preference.

- [207] Overall, medical professionals are to be judged by the standards at the time of the events, and not on the basis of what could only have been known with hindsight or with advances in medical knowledge. Furthermore, in a case of two reasonable options or approaches, as long as the defendant practitioner follows one of them, they cannot be characterized in law to have breached their duty of care: O'Connor at paras. 110-111, citing Brimacombe at paras. 75, 77.
- [208] In Focken v. Fraser Health Authority, 2022 BCSC 2124, aff'd 2024 BCCA 74, this Court noted as follows:
- [60] In an action for medical negligence, the fact that something has gone wrong is not in itself evidence of negligence: Dudas v. Munro, 1997 CanLII 4313 (B.C.S.C.) at para. 6, 1997 CarswellBC 851.
- [61] When a trial judge is faced with a case that provides two reasonable options or approaches to a difficult clinical circumstance, as long as defendant physician follows one of two reasonable courses, he cannot be characterized as having breached his duty of care: Brimacombe v. Dr. Mathews, 2001 BCCA 206 at paras. 74-77, leave to appeal to SCC ref'd, 28666 (6 December 2001).
- [Emphasis added.]
- [209] With the above principles in mind, it is clear on the evidence before me that the use of cervical headgear to treat Class II malocclusion and buck teeth was consistent with the standard of care of orthodontists in 1989. Indeed, the qualified medical practitioners who testified before me, including both orthodontists, stated that this was a standard practice in 1989 for this condition, and still continues to be standard practice.
- [210] The evidence also indicates that it was not standard practice to investigate or monitor the patient's airway size during orthodontic treatment.
- [211] Dr. Hang testified that he became aware of the dangers to the airway posed by cervical headgear in 1992 through his own investigations. However, it was Dr. Hang's evidence that prior to 1992, considering the impact of orthodontic treatments on a patient's airways was not part of his standard practice, even though he had already rejected the aesthetic utility of cervical headgear and extractions. In his own words, he was taught nothing in his schooling about the potential for such an impact, and prior to 1992 he could not have talked about the potential for cervical headgear to affect the airway at all. Nor was that knowledge or concern part of the practice of traditional orthodontics.

- [212] Dr. Hang further agreed in cross-examination that, in 1989, it was not part of his practice to look at or assess patients' airways in the course of orthodontic treatment. In redirect by Mr. Lalani, when asked about the teaching of airway-related issues to orthodontics students, he replied that in his experience, effects of cervical headgear on sleep apnea was not discussed at the teaching level, and he does not believe that the curriculum has changed very much since then in this respect.
- [213] Dr. Pliska testified that cervical headgear was the most common orthodontic method of treating Class II malocclusion, and has been for many years, including in 1989.
- [214] Dr. Pliska opined that the profession as a whole generally believed in 1989, and continues to believe, that the airway is not compromised by properly applied cervical headgear, and that no peer reviewed or authoritative studies have established a causal connection between cervical headgear and narrowing of the airway or OSA. I accept Dr. Pliska's evidence on the state of orthodontic practice and knowledge over that of Dr. Hang, whose report on that topic was largely drafted by Mr. Lalani.
- [215] Although the experts that Mr. Lalani relies upon, other than Dr. Hang, are not qualified to opine on the standard of care in orthodontics, all of them appear to concede that the mainstream of orthodontics in 1989, and even today, is consistent with the standard practice in the industry and does not consider that cervical headgear harms or narrows a patient's airway or contributes to OSA.
- [216] Dr. McCarty, though not able to speak to the standard of care of orthodontics, suggested that there are "two truths" based on his research that are reflected in what he considers to be two schools of thought within orthodontics. However, he agreed that the "consensus view" within orthodontics is that no orthodontic tools have been shown to cause sleep apnea, but that they may be able to help with this condition. Dr. McCarty's report is essentially an argument for a more cautious approach by the orthodontic profession until better research is done, but he agrees that the orthodontic profession has generally rejected concerns about the use of cervical headgear on the airway as unsubstantiated.
- [217] On all the evidence, I find that Dr. Lear would have not known or believed that cervical headgear was capable of modifying or narrowing Mr. Lalani's airway in 1989, or during the following two years when Mr. Lalani continued to use cervical headgear under Dr. Lear's supervision. Nor did the standard of care for an orthodontist in those years involve any consideration or assessment of the patient's airway when recommending or fitting a patient for cervical headgear.
- [218] Overall, I find that the evidence before me establishes that the use of cervical headgear to treat Class II malocclusions and buck teeth was and is part of the standard practice in orthodontics. Although Mr. Lalani's expert evidence in this case suggests there may be more than one school of thought on this issue, the experts at trial were generally agreed that the use of cervical headgear to treat Class II malocclusions was firmly endorsed by the dominant school of thought within orthodontics in 1989. I also find that it was not standard

practice in 1989 to investigate and monitor the effects of cervical headgear on the patient's airway.

Did Dr. Lear breach the standard of care relating to the use of headgear?

- [219] Putting aside the current debate within the profession as to whether cervical headgear can or does modify the airway, Mr. Lalani has led no evidence that Dr. Lear was "knowingly" modifying his airway, as he asserts. The expert opinion evidence of Dr. Hang and Dr. Pliska, the two experts qualified to opine on orthodontic knowledge and practices, both testified that cervical headgear was not something that was believed by the profession to modify the airway of the patient in 1989.
- [220] There is no evidence before me that Dr. Lear deviated from the standard practice for orthodontics at the time he treated Mr. Lalani with cervical headgear.
- [221] As noted, all of the qualified experts in this case agreed that the standard practice between 1989-1991 was to treat Class II malocclusions with cervical headgear. While there are evidently some orthodontists or related professionals in other parts of the world who now question the use of cervical headgear, including the plaintiff's experts in this case, it is clear on the evidence before me that the use of cervical headgear was, and remains, endorsed by the dominant school of thought within the profession.
- [222] In this case, Mr. Lalani also argues that mere adherence to practice standards should not absolve Dr. Lear of negligence. He cites the case of *Rossman v. Sas*, [1997] O.J. No. 4384, 1997 CarswellOnt 4274, an Ontario case in which a dentist was found to have been negligent for perforating a patient's sinus during surgery, despite following the standard medical practice during the procedure.
- [223] The following passage from *Rossman*, citing *ter Neuzen*, clarifies that negligence in this context requires proof that the common practice is fraught with danger, and, as a matter of common sense rather than scientific debate, "there are obvious existing alternatives any reasonable person would utilize in order to avoid a risk", in which case, "one could conclude that the failure to adopt such measures is negligent notwithstanding that it is the prevailing practice among practitioners in that area":
- [126] In most cases where the medical practitioner, (in this case dental practitioner), conforms to the commonly accepted practice of his or her profession, they are not found to be negligent. There are, however, exceptions to this rule. In *ter Neuzen v. Korn* (1995), 127 D.L.R. (4th) 577 (S.C.C.), Sopinka J. for the court stated as follows at paras. 43 - 44:

The foregoing principles were also endorsed by this court in *Waldick v. Malcolm* (1991), 83 D.L.R. (4th) 114, [1991] 2 S.C.R. 456, 8 C.C.L.T. (2d) 1. Thus, it is apparent that conformity with standard practice in a profession does not necessarily insulate a doctor from negligence where the standard practice itself is negligent. The question that remains is under what circumstances will a professional standard practice be judged negligent? It seems that it is only where the practice does not conform with basic care which is easily understood by the ordinary person who has no

particular expertise in the practices of the profession. That is, as Professor Fleming suggests, where the common practice is fraught with danger, a judge or a jury may find the practice is itself negligent.

As was observed in Lapointe, courts should not involve themselves in resolving scientific disputes which require the expertise of the profession. Courts and juries do not have the necessary expertise to assess technical matters relating to the diagnosis and treatment of patients. Where a common and accepted course of conduct is adopted based on the specialized and technical expertise of professionals, it is unsatisfactory for a finder of fact to conclude that such a standard was inherently negligent. On the other hand, matters falling within the ordinary common sense of juries can be judged to be negligent. For example, where there are obvious existing alternatives which any reasonable person would utilize in order to avoid a risk, one could conclude that the failure to adopt such measures is negligent notwithstanding that it is the prevailing practice among practitioners in that area.

[Emphasis added.]

[224] In *ter Neuzen*, after considering the case of *Anderson v. Chasney*, [1949] 4 D.L.R. 71, 1949 CanLII 236 (M.B.C.A.), *aff'd* [1950] 4 D.L.R. 223, 1950 CanLII 336 (S.C.C.), the Supreme Court of Canada explained the required analysis as follows:

[51] I conclude from the foregoing that, as a general rule, where a procedure involves difficult or uncertain questions of medical treatment or complex, scientific or highly technical matters that are beyond the ordinary experience and understanding of a judge or jury, it will not be open to find a standard medical practice negligent. On the other hand, as an exception to the general rule, if a standard practice fails to adopt obvious and reasonable precautions which are readily apparent to the ordinary finder of fact, then it is no excuse for a practitioner to claim that he or she was merely conforming to such a negligent common practice.

[Emphasis added.]

[225] While I accept the principles of law raised by Mr. Lalani in this regard, I find that *Rossman* is distinguishable on the facts before me.

[226] In *Rossman*, the Court found that the prevailing standard was negligent, noting that a simple test involving the patient holding their nose and blowing, to see if "bubbles" were visible from the surgical site, could have been used to determine if there was a perforated sinus. Although this was not a part of the standard practice at the time, the Court found that it ought to have been, finding as follows:

[129] In the case at bar, the procedure of asking a patient to hold his or her nose and blow in order to determine if air bubbles can be seen from the surgical site does not, in my view, involve a difficult or uncertain question of medical treatment. Although scientifically based, it is not a highly technical procedure beyond common sense. If positive pressure created in the sinus will reveal the presence of a perforation, this simple test should be used, especially where there is obvious risk of perforation given the proximity of the sinus floor.

In these circumstances an endodontist ought to have foreseen that with the significant risk of a perforation, that whether or not he sees a 'gaping hole', it would be prudent to rule out a perforation. The benefits to the patient by such simple testing can be enormous.

[130] The techniques described by Dr. Olivieri-Munroe to rule out a perforation is relatively straight forward and could easily be used whether or not an endodontist actually sees a gaping and defined "black hole".

[Emphasis added.]

[227] In the case at bar, however, I am not satisfied that any "reasonable precaution which [is] readily apparent to the ordinary finder of fact" ought to have been employed to mitigate an "obvious risk": ter Neuzen at para. 51; Rossman at para. 129. While Mr. Lalani perceives an "obvious risk" based on his research and discussions with a group of practitioners that share his view, the risk he perceives is not an obvious one to the lay person and has been rejected by the profession.

[228] Rather, I find that the issue of whether cervical headgear is an appropriate treatment for Class II malocclusions, or whether this pervasive technique compromises the integrity of the patient's airway, involves "difficult or uncertain questions of medical treatment [and] complex, scientific or highly technical matters that are beyond the ordinary experience and understanding", such that it is not open to me to find the widespread and standard practice of the use of cervical headgear by orthodontists to be negligent: ter Neuzen at para. 51.

[229] On the evidence before me, I find that Dr. Lear did not deviate from the established standard of care for the recommendation of cervical headgear in 1989, nor that the standard of care was itself negligent at that time.

Was risk to the airway a risk that orthodontists were required to inform their clients of in order to obtain informed consent to headgear in 1989?

[230] Mr. Lalani relies particularly on a lack of informed consent, arguing that issue is not related to the standard of practice of orthodontists generally, and instead related to the interests of the patient in having all known material risks explained before their treatment.

[231] Relying on the reports of Dr. Hang, Dr. Coren, Dr. da Cruz, and Dr. McCarty, Mr. Lalani submits that, at the time of his treatment in 1989, orthodontic literature identified the following side effects of cervical headgear: forcing both the upper and lower jaw to grow back and down into the upper airway, forcing the tongue farther into the throat; stunting the growth of the skeletal breathing structures of the upper airway; and causing "facial retrusion". I note that the literature reviews and references in these reports to support those known side effects were generally provided by Mr. Lalani.

- [232] While Mr. Lalani pleads that the failure of Dr. Lear to obtain informed consent for the headgear amounts to the tort of battery, his submissions with regard to informed consent pertained primarily to the law of negligence.
- [233] Generally speaking, a claim that a physician has failed to obtain informed consent is a claim in negligence, not battery; a claim in battery would only arise if the claim was in the nature of a misrepresentation of the procedure or a different procedure was carried out than the one to which the patient had provided consent: *Liu v. Chuo*, 2019 BCSC 109 at para. 80, citing *Reibl v. Hughes*, [1980] 2 S.C.R. 880 at 888-892, 1980 CanLII 23.
- [234] Mr. Lalani has not alleged or established that Dr. Lear misrepresented the nature of the treatment, nor that he provided a different treatment than Mr. Lalani and his mother consented to. The issues raised by Mr. Lalani with respect to the asserted risks of cervical headgear fall squarely into the question of whether Dr. Lear informed him and his mother of the risks associated with that treatment, and therefore whether the consent to the treatment was informed -- not whether that consent was given at all. With that in mind, I will consider the issue of informed consent within the context of Mr. Lalani's claim in negligence.
- [235] It is well established that the relationship between a medical professional and patient includes a duty to disclose material risks and obtain informed consent. The principle of informed consent was canvassed and summarized by our Court of Appeal in *Van Mol v. Ashmore*, 1999 BCCA 6:
- [98] The issue was discussed in *Malette v. Shulman* (1990), 67 D.L.R. (4th) 321 (Ont.C.A.). That case involved the giving of a blood transfusion to someone who carried a card saying that she did not wish a blood transfusion even in an emergency. Mr. Justice Robins, for the Ontario Court of Appeal, said this, at pp. 327-8:

The doctrine of informed consent has developed in the law as the primary means of protecting a patient's right to control his or her medical treatment. Under the doctrine, no medical procedure may be undertaken without the patient's consent, obtained after the patient has been provided with sufficient information to evaluate the risks and benefits of the proposed treatment and other available options. The doctrine presupposes the patient's capacity to make a subjective treatment decision, based on her understanding of the necessary medical facts provided by the doctor and on her assessment of her own personal circumstances.

- [236] The doctrine of informed consent dictates that every individual has a right to know what risks are involved in a medical treatment and a concomitant right to make meaningful decisions based on a full understanding of those risks: *Hollis v. Dow Corning Corp.*, [1995] 4 S.C.R. 634 at 655, 1995 CanLII 55.
- [237] The legal principles governing the issue of informed consent in medical negligence cases were recently summarized by this Court in *Buckingham v. Hobza*, 2023 BCSC 399:

- [194] The duty of obtaining informed consent to medical treatment requires that the physician "answer any specific questions posed by the patient as to the risks involved and , without being questioned, disclose to him the nature of the proposed [treatment], its gravity, any material risks and any special or unusual risks attendant upon the performance of [it]": Hopp v. Lepp, [1980] 2 SCR 192 at p.210. This includes a "mere possibility" that normally would not need to be disclosed, if its occurrence carries serious consequences. In that case it should be regarded as a material risk: Reibl v. Hughes, [1980] 2 SCR 880 at 885.
- [195] In deciding whether a risk is material, and therefore should be explained to the patient, an objective approach should be taken. The crucial question in determining the issue is whether a reasonable person in the patient's position would want to know of the risk: Ciarlariello v. Schacter, [1993] 2 SCR 119, at para. 36.
- [196] In other words, "a medical person must disclose those risks to which a reasonable patient would be likely to attach significance in deciding whether or not to undergo the proposed treatment. In making this determination, the degree of probability of the risk and its seriousness are relevant factors": Rawlings v. Lindsay, (1982) 20 CCLT 301 (BCSC) per McLachlin J. (as she then was), cited with approval in Brito (Guardian ad litem) v. Woolley, 2003 BCCA 397 at para 32, leave to appeal refused [2003] S.C.C.A. No. 418.
- [197] Expert evidence is not determinative of the materiality of the risk: Reibl at pp.894-895, Brito at para. 36.
- [198] This approach "marks the rejection of the paternalistic approach to determining how much information should be given to patients. It emphasizes the patient's right to know and ensures that patients will have the benefit of a high standard of disclosure": Arndt v. Smith, [1997] 2 SCR 539 at pages 552-53.
- [199] If the court concludes that the physician failed to provide the necessary disclosure, the plaintiff must then demonstrate that a reasonable person in the same circumstances would have refused the recommended treatment, if the undisclosed risk had been disclosed.
- [238] The proper analysis regarding the materiality of risk was discussed by this Court in Brito v. Woolley, 2001 BCSC 1178, aff'd on other grounds 2003 BCCA 397:
- [133] What constitutes a special, material, or unusual risk will depend on the particular facts of the case. A mere possibility will be included as a material risk if the occurrence of that mere possibility is serious, for example, if it can result in paralysis or death: Reibl v. Hughes, supra; Puranen v. Thomson (1987), 46 Man.R. (2d) 55 (Q.B.). Material risks include those risks which the doctor knows, or ought to know, that a reasonable person in the patient's position would consider in deciding whether to undergo a procedure or treatment: Ciarlariello v. Schacter, [1993] 2 S.C.R. 119.

[134] The professional standards of physicians as to whether a risk is material are not in themselves determinative of this issue. Specifically, expert medical evidence as to whether a particular risk should normally be explained to a patient is relevant but not conclusive: *Puranen v. Thomson*, supra. Rather, this evidence is simply a factor to be considered together with the evidence of the patient and his or her circumstances.

[135] Evidence of a physician's practice in providing information to patients when securing their consent to a treatment or procedure is both admissible and important in deciding whether the physician did so on any particular occasion: *E.I. Picard & G.B. Robertson*, *Legal Liability of Doctors and Hospitals in Canada*, 3rd ed. (Scarborough: Carswell, 1996) at 157.

[Emphasis added.]

[239] Expert evidence is relevant to identifying the risks associated with a particular procedure and will have a bearing on the materiality of the risk recognized by this Court but is not determinative of the issue of informed consent. However, materiality of risk is ultimately a question to be determined by the trier of fact: *Parhar v. Weaver*, 2021 BCSC 123 at para. 91, aff'd 2022 BCCA 134, citing *Reibl*.

[240] The consideration of industry accepted practice, as it relates to the duty to obtain informed consent, is not determinative, but is one of the factors to be considered in assessing the materiality of risk: *Schinz v. Dickinson*, 59 B.C.L.R. 351 at paras. 15-18, 1984 CanLII 400 (C.A.). In so holding, Justice Esson also emphasized at para. 23 that *Hopp v. Lepp*, [1980] 2 S.C.R. 192, 1980 CanLII 14, does not stand for the proposition "that any risk, however slight its magnitude, or however remote the chance that it would come to pass, must be disclosed". Aside from answering specific questions, "what must be disclosed is the nature of the proposed operation, its gravity and 'any material risks and any special or unusual risks attendant upon the performance of the operation'".

[241] This test is to be applied regarding a "reasonable person in the patient's position", though the patient's particular concerns must also be reasonably based, and their position must be objectively assessed in terms of reasonableness: *Reibl*.

[242] Mr. Lalani relies on the case of *Cojocaru (Guardian Ad Litem) v. British Columbia Women's Hospital*, 2009 BCSC 494, rev'd in part 2013 SCC 30, and the following passage of *Ciarlariello v. Schacter*, [1993] 2 S.C.R. 119 at 133, 1993 CanLII 138, cited therein:

Reibl v. Hughes, supra, indicates that the disclosure which must be made to a patient will often be more than that which the medical profession might consider appropriate to divulge. Although expert medical evidence on this issue is still relevant, it is no longer decisive in determining whether or not sufficient information was given to a patient to enable that patient to make an informed consent. The test now focuses on what the patient would want to know. Laskin C.J. put the position in these words at pp. 894-95:

To allow expert medical evidence to determine what risks are material and, hence, should be disclosed and, correlatively, what risks are not material is to hand over to the medical profession the entire question of the scope of the duty of disclosure, including the question whether there has been a breach of that duty. Expert medical evidence is, of course, relevant to findings as to the risks that reside in or are a result of recommended surgery or other treatment. It will also have a bearing on their materiality but this is not a question that is to be concluded on the basis of the expert medical evidence alone. The issue under consideration is a different issue from that involved where the question is whether the doctor carried out his professional activities by applicable professional standards. What is under consideration here is the patient's right to know what risks are involved in undergoing or foregoing certain surgery or other treatment.

In deciding whether a risk is material and therefore, one which should be explained to the patient, an objective approach should be taken. The crucial question in determining the issue is whether a reasonable person in the patient's position would want to know of the risk.

- [243] Mr. Lalani argues that, at the time of his treatment, orthodontists were "required to inform their clients that cervical headgear had the ability to disfigure the face and narrow the upper airway, impacting respiratory function, and that there were alternatives to cervical headgear to straighten teeth that didn't have these deleterious effects". He takes the position that all orthodontists ought to have warned their patients about these side effects, and suggested alternatives such as "expansion options" or taking a "wait and see" approach.
- [244] He further argues that his mother, in particular, was risk averse when it came to her children's health and their respiratory function, and that this Court should consider her particular sensitivities in making this assessment.
- [245] I find that Ms. Lalani's particular concern about health and respiration does little to assist Mr. Lalani in this case. The test is not a subjective one but is rather a modified objective test taking into account the requirements for information of a "reasonable person in the plaintiff's position". Little turns on this in any event, as I find that any parent would be concerned about a material risk to their child's respiratory function known to be caused by cervical headgear. The requirement to inform Ms. Lalani of such a risk does not turn on her subjective heightened concerns about respiration, but on whether such a material risk was known to the profession at all at the time.
- [246] As noted in *ter Neuzen* at para. 34, the conduct of medical professionals "must be judged in the light of the knowledge that ought to have been reasonably possessed at the time of the alleged act."
- [247] The plaintiffs' experts primarily provided evidence as to what they believed ought to have been, and could have been, known as a risk in 1989 if orthodontists had looked beyond what was taught and examined in their education and training.

- [248] Dr. Hang contended that an orthodontist in 1989 had a duty to inform patients of "a risk that pulling one's upper jaw back can lead to lifelong breathing difficulties". Although Dr. Hang was advocating against the use of cervical headgear at the time of the treatment, he admits that he was unaware of any literature connecting cervical headgear to breathing problems until his own epiphany 1992. This was not a material risk that Dr. Hang himself was discussing with his patients, even as he recommended against cervical headgear, prior to 1992.
- [249] Dr. Hang, who strongly believes that there is a relationship between cervical headgear and OSA, also agreed in cross-examination that the assertion of such a clinical risk is highly controversial within the profession, and still in its infancy. People are just beginning to understand it, and studies have only scratched the surface.
- [250] Overall, I find that Dr. Hang's evidence that orthodontists in 1989 had a duty to inform patients that cervical headgear might pull one's upper jaw backward, which could lead to lifelong breathing difficulties, does not describe the standard practice of orthodontists in 1989 (including his own practice). Nor does it describe a known risk within the profession.
- [251] I have found that neither the reports of Dr. da Cruz nor Dr. Coren are entitled to any weight on this Court. In any event, Dr. da Cruz at no point contends that there was a duty on orthodontists to warn of such a risk in 1989, nor is he properly qualified to do so. Dr. Coren, who was also not qualified to opine on the standard of care of an orthodontist, also agreed in cross-examination that assessing the airway was not part of orthodontic practice in 1989, or at all.
- [252] Similarly, Dr. McCarty offered no opinion on the issue of what material risks of cervical headgear were known to the orthodontic profession in 1989, nor was he qualified to do so. While his evidence might indirectly go to the existence or materiality of risks of cervical headgear involving the airway, I agree with the defendant that any such risk must be proven not only to be material but also known to the profession at the relevant time, to found a claim in tort.
- [253] The defendant submits that the onus is on Mr. Lalani to show that the narrowing of his airway and the development of OSA were material risks of cervical headgear or otherwise risks of which he ought to have been informed. The defendant does not contest the fact that a duty to warn is triggered where a recognized risk, even if only a remote one, could produce serious harm. However, the defendant submits that this rule still requires the risk to exist. He argues that, in this case, it is "abundantly clear" that "airway-related impacts were not only immaterial as a recognized risk, but that they were not recognized risks at all in 1989 (or in fact even now)".

[254] Dr. Pliska's opinion sets out that in 1989 none of the listed risks that Mr. Lalani argues he ought to have been cautioned about were known to be risks within the orthodontic profession. Nor were they "reasonably thought to be associated with the proper use of cervical headgear." The same is true today.

[255] As noted above, Dr. Pliska was one of several authors of the AAO White Paper on the relationship between OSA and orthodontics. That report, which Dr. Pliska endorsed in his expert report before me, concluded the following after reviewing the available literature:

Growth modification, including orthopedic headgear (HG), which alters the direction of growth of the maxilla, has long been a staple of certain orthodontic treatments. While dentoalveolar movement can be significant, the absolute skeletal change to the position of the maxilla elicited by headgear is relatively small. Consequently, meaningful effects on volume or morphology of the upper airway should not be expected. A few studies with small sample sizes or methodological limitations have examined this relationship directly. The best evidence available at this time, however, indicates that headgear does not pose an increased risk to the airway in that the airway remains the same or increases over the study periods reported.

Anecdotal concern exists about whether headgear used during adolescence could contribute to the future development of OSA as an adult. To date, no studies have been performed using objective PSG to demonstrate an elevated risk of OSA in HG patients. Studies have investigated this concern indirectly by evaluating the radiographic airway in two dimensions with lateral cephalograms on HG patients. One study concluded that the absolute value of the airway dimension was smaller in HG patients than activator patients, but these differences were both small and not statistically significant. A longitudinal study, examined patients over a twelve-year period reported that the radiographic dimension of the airway decreased during the treatment phase but increased to the level of controls during follow-up. A prospective, randomized, blinded study, demonstrated an increase in airway during the six-year study period. In summary, the best evidence available at this time indicates that HG does not pose an increased risk to the airway in that the airway dimension remains the same or increases over the study periods reported.

[Emphasis added.]

[256] With respect to his own practice, Dr. Pliska testified in cross-examination that he generally screens for symptoms of OSA and takes any such symptoms into account in his orthodontic practice. However, he is not a medical doctor and cannot diagnose that condition. In response to questioning by Mr. Lalani, Dr. Pliska testified that he does not refer his patients for polysomnography or other diagnostic testing related to sleep-disordered breathing before recommending the use of cervical headgear or other orthodontic treatments. Dr. Pliska was not asked by Mr. Lalani to comment on whether such testing may or may not have been part of the standard practice in 1989, but I find on all the evidence that it was not.

- [257] I find Dr. Pliska's evidence on the risks known to the profession in 1989, and the materiality of those risks, more authoritative than Dr. Hang's, or any of the plaintiff's other experts. While Dr. Pliska's expert evidence on the materiality of this risk is not determinative of the issue, I do consider it relevant to my analysis.
- [258] I find that the alleged risk that cervical headgear causes or contributes to the narrowing of the airway or the development of OSA was not a known risk in 1989.
- [259] Even now, at a time when OSA may now be a factor that an orthodontist will screen for, and further study on this issue may still be warranted, no statistically significant relationship has been established between the use of cervical headgear and the development of OSA. While Dr. McCarty and Dr. Hang complain that this is because the right kind of research has not yet been done, the evidence before me does not establish the material risk that Mr. Lalani asserts.
- [260] In the absence of evidence establishing that the narrowing of the airway or OSA was a material risk of headgear that was known, or ought to have been known by the orthodontic profession in 1989, I cannot find that orthodontists in 1989 were required to discuss those risks in order to obtain informed consent for the use of cervical headgear at that time.

Did Dr. Lear conceal a known risk to Mr. Lalani's airway in obtaining consent from Mr. Lalani and his mother?

- [261] Mr. Lalani submits that Dr. Lear did not fulfil his duty to obtain informed consent in that he "wilfully concealed side effects so as not to 'confuse the patient'". In this regard, Mr. Lalani references the College Letter, in which Dr. Lear states the following:

My motivation for headgear use was not selfish, sinister or commercial. It was the most appropriate modicum for his problem. However, it would not have been appropriate for me to confuse the patient with discussion of multiple arguments for and against a plethora of techniques.

- [262] While Mr. Lalani interprets the above to convey Dr. Lear's deliberate concealment or suppression of known risks to his airway, the defendant says that such an interpretation is inconsistent with the balance of the College Letter itself. The defendant submits that a more reasonable interpretation of Dr. Lear's desire not to "confuse the patient" was "to dispense with proposing alternative techniques aimed at addressing risks that the orthodontic profession considered not to be remote or slight, but in fact to be non-existent".
- [263] The College Letter was drafted in response to Mr. Lalani's complaint, and presumably Mr. Lalani's assertion that this risk was known or ought to have been known within the profession. Dr. Lear expresses in his Letter that detailing such controversies within the profession might confuse his patients.

- [264] However, it is unclear from this Letter whether this was a controversy that Dr. Lear was aware of in 1989, or whether he is making an argument about what would have been appropriate had he been aware of the controversy Mr. Lalani asserts. We can no longer ask him to clarify. This is primarily due to the lengthy delay in Mr. Lalani discovering his respiratory difficulty and bringing this claim.
- [265] Regardless, the evidence in this case establishes that narrowing of the airway was not a known risk of cervical headgear in 1989. It was not a known risk even to many of those who rejected the use of headgear at that time, including Dr. Hang. The evidence at trial is not sufficient for me to find that it was a risk that Dr. Lear was aware of, or that he should have been aware of.
- [266] Although Dr. Lear did not advise Mr. Lalani or his mother of a risk to Mr. Lalani's airway from the use of cervical headgear, I find that Mr. Lalani has not established that Dr. Lear was required to do so at that time to fulfil his duty to obtain informed consent.

CAUSATION

- [267] I have found that Mr. Lalani has not established that Dr. Lear breached his standard of care, that the standard of care itself was negligent, nor that Dr. Lear failed to obtain informed consent for the use of cervical headgear. Nevertheless, I will go on to consider the issue of causation, because I consider that issue to also be dispositive of this litigation. It is also at the heart of Mr. Lalani's dispute in this case.
- [268] In order to succeed on his claim in negligence, Mr. Lalani must prove that the defendant's wrongful conduct caused or contributed to the alleged injuries, in fact and in law. In *Jenkins v. Irving*, 2020 BCSC 391, aff'd 2022 BCCA 64, this Court succinctly summarized the proper causation analysis as follows:
- [115] The plaintiff must establish on a balance of probabilities that the defendant's negligence caused or materially contributed to an injury. If the defendant's negligence is one cause of an injury, or if it exacerbates or aggravates an existing condition, then the defendant is liable for causing the resulting injury: *Athey v. Leonati*, [1996] 3 SCR 458 at para. 47. The defendant's negligence need not be the sole cause of the injury so long as it is part of the cause beyond the range of *de minimus*. Causation need not be determined by scientific precision: *Athey* at paras. 13-17.
- [116] The primary test for causation asks: "but for the defendant's negligence, would the plaintiff have suffered the injury?" This test recognizes that compensation for negligent conduct should only be made where there exists a substantial connection between the injury and the defendant's conduct: *Resurface Corp. v. Hanke*, 2007 SCC 7 at paras. 21-23.

[269] It is not enough to show that the defendant's conduct increased the likelihood of damage and may have caused it; it must be proven on a balance of probabilities that the defendant's conduct did cause the damage in the sense that it would not otherwise have happened: *Bohun v. Segal*, 2008 BCCA 23 at para. 41, citing *Barker v. Corus*, [2006] U.K.H.L. 20, [2006] 3 All E.R. 785 at para. 1.

[270] However, scientific proof of causation is not required. An inference of causation may be made, even where scientific proof of causation is not present. In *Snell v. Farrell*, [1990] 2 S.C.R. 311 at 330, 1990 CanLII 70, Justice Sopinka observed for the Court:

It is not therefore essential that medical experts provide a firm opinion supporting the Plaintiff's theory of causation. Medical experts ordinarily determine causation in terms of certainties whereas a lesser standard is demanded by the law.

[271] Mr. Lalani argues that his cervical headgear caused him to develop OSA. He says that Dr. Hang, Dr. Coren, Dr. da Cruz, and Dr. McCarty all opine that the cervical headgear narrowed his airway, and that Dr. McCarty opines that his narrow upper airway has caused his OSA. Mr. Lalani further submits that Dr. Pliska, the defence expert, makes no mention of his upper airway and rather opines on issues relating to potential soft tissue and neurological causes, which Mr. Lalani says is beyond the scope of Dr. Pliska's expertise.

[272] Mr. Lalani also relies on what he considers to be "basic physics" relating to the application of force on the bone structure of the face and head, and discussed in his expert reports, most notably that of Dr. da Cruz. He submits that all of the above changes to anatomy have been connected, in the orthodontic literature he references in his experts' reports, to upper airway respiratory dysfunction during sleep, obstructed airways, and OSA.

[273] As I understand it, Mr. Lalani's position is that his cervical headgear would have caused his airway to narrow, and that his narrowed airway then caused him to suffer from OSA. His argument is that this is the natural and inevitable result of the forces exerted on the jaw and other skeletal elements of the face and head and would happen to anyone using cervical headgear, not just him. He also argues that, because his Brace has resolved his OSA by exerting forces that he says are opposite to the forces of his cervical headgear, his headgear must have been the original cause of his OSA.

[274] I do not accept Mr. Lalani's lay opinions about physical forces and how they act on human anatomy. Nor do I accept Mr. Lalani's logic that, because the Brace he developed has resolved his OSA symptoms, that his childhood headgear must have caused his OSA.

[275] For the reasons stated above, I can give no weight to the reports of Dr. Coren and Dr. da Cruz. Dr. Hang's opinion, particularly his oral evidence, is relevant to the standard of care of orthodontists, but his causation opinion is based almost entirely on quotes from older studies prepared and included in his report by Mr. Lalani. While Dr. Hang has some relevant anecdotal experience as a practitioner of orthodontics, I give this evidence less weight than modern studies and research published in authoritative journals on the

relationship between headgear forces and the patient's airway.

- [276] Dr. McCarty, as the only medical doctor to give evidence before me, and as a specialist in the area of sleep medicine and OSA, is uniquely qualified to opine upon the causes of OSA. In cross-examination, Dr. McCarty agreed that OSA is multi-factorial and is often diagnosed through trial and error.
- [277] The oral expert opinion evidence on this issue at trial of Dr. Hang, Dr. McCarty and Dr. Pliska consistently indicates that a narrower than average airway is not predictive or determinative of OSA. Dr. McCarty opined that no single anatomic feature is determinative or predictive of OSA. One can have a completely normal airway size and still have sleep apnea, and a person with a small airway can have no apnea. While Dr. McCarty believes that the use of cervical headgear requires a more cautious approach, and he has come to believe that cervical headgear has the potential to restrict the airway and cause OSA, he agrees it cannot be said that there is a direct correlation between the use of cervical headgear and the development of OSA, and no single anatomic feature is determinative.
- [278] Nevertheless, Dr. McCarty opines in the conclusion to his report that "but for the cervical headgear" Mr. Lalani "would not have OSA."
- [279] I find that Dr. McCarty's causation opinion in this regard is undermined by a number of factors, including the following:
- a) First, Dr. McCarty relies on a number of assumptions regarding Mr. Lalani's clinical history in his causation analysis that were not established in the trial evidence, including that Mr. Lalani's "daytime somnolence symptomatically completely responded to [CPAP] therapy". That is not a conclusion supported by Mr. Lalani's testimony before me at trial, though it is an assumption Dr. McCarty was told to make;
 - b) Second, Dr. McCarty relies on imaging provided by Mr. Lalani between 2013 and 2021 as establishing Mr. Lalani's "post-treatment condition" for his treatment ending in 1992. He bridges that gap in time by noting that Mr. Lalani was healthy and active as an eight-year-old, "pre-treatment." I do not find this asserted temporal connection to be as compelling as Dr. McCarty apparently does;
 - c) Dr. McCarty argues that the results of a 2018 study into the effects of cervical headgear on airway size, which found no statistically significant change to airway size following the use of headgear, nevertheless substantiates the possibility of harm. He appears to reject the study's findings in this regard, and to have overstated the statistical value of results that were just as likely to occur by chance, to serve his argument;
 - d) Dr. McCarty's expertise on the relationship between headgear and OSA is notably weaker than that of Dr. Pliska's. In his tendered report at trial, and in earlier reports that were served but not tendered, he relies primarily on older journal articles and books that posit but do not establish a causal relationship, some of which he agrees are very controversial. While he recognizes that more modern and authoritative studies find no statistically

relevant correlations, he relies on what he calls "notions," such as "the notion that cervical headgear is fully capable of shrinking the dimensions of the upper airway" to support his causation analysis.

[280] I also do not find his causation analysis compelling. Although Dr. McCarty lists several factors that lead to his causation conclusion, his opinion essentially posits that:

- a) because cervical headgear is known to cause a narrowing of the throat (or at least there is a "notion" that this might be the case); and
- b) Mr. Lalani had cervical headgear as a child and Mr. Lalani has since been observed by other medical practitioners to have a narrow throat; and
- c) A narrow throat is a known factor in the development of OSA;
- d) Therefore, Mr. Lalani would not have had OSA but for his cervical headgear.

[281] I am not convinced by this reasoning.

[282] Dr. Pliska agreed that a narrow airway is one of many risk factors that could contribute to OSA, and I accept both Dr. McCarty's and Dr. Pliska's evidence on this point. However, Dr. Pliska also opined that the bulk of academic and clinical research on this subject, both as reviewed in the AAO's White Paper, and the research that he reviewed for his report, does not support a correlation or causal relationship between the use of cervical headgear and permanent changes to the jaw or the upper airway.

[283] Dr. Pliska, in his report, and then again in cross-examination, considered the most current and authoritative research on this issue. That research does not establish a statistically significant relationship between the use of cervical headgear and the causes of OSA. Dr. Pliska remained unshaken in this position during cross-examination. He rejected Mr. Lalani's suggestions that cervical headgear treatment brings the upper jaw permanently down and back, restricting the airway. He opined that while cervical headgear treatment restricts the forward direction of growth in the upper jaw temporarily while it is used, modern studies show that the long-term effect of such restriction is negligible. Nor does the authoritative research show that a limitation in the forward growth of the upper jaw causes restrictions to the airway, as asserted by Mr. Lalani and his experts.

[284] Dr. Pliska also rejected Mr. Lalani's theories, and those of several of his experts, about the application of the physical forces involved in cervical headgear. Dr. Pliska distinguished between an analysis that assumes that the facial skeleton and dental arches and teeth are a solid block through which forces move uniformly, and the forces applied by cervical headgear, which he says are applied primarily to teeth that move independently within the dental arches. I found Dr. Pliska's explanation of the forces exerted by cervical headgear to be more informed and compelling than those of Mr. Lalani or his experts.

- [285] All of the experts agreed that OSA is a complex condition, not yet well-understood, and generally caused by a multitude of factors in any given case.
- [286] On the evidence before me, the largely theoretical and anecdotal concerns about headgear recorded in Mr. Lalani's research and incorporated by Mr. Lalani into his expert's reports, has yet to be born out in modern and broader controlled studies. Mr. Lalani, and a number of his experts, would say that these studies have not been done because the practice of orthodontics is entirely profit-oriented and suppresses any such knowledge. I find that the current research on this topic reviewed by Dr. Pliska in his report, including research coming out of Europe, does not support Mr. Lalani's allegations in this regard.
- [287] I am not convinced on the expert evidence before me that cervical headgear generally causes OSA. Proof of this connection is essential to Mr. Lalani's theory of liability in this case, but it is not sufficient. While further studies and evidence may yet find such a correlation or even a causal relationship, this would still not be enough. Even if the expert evidence established that headgear could cause a narrowing of the airway, I find that the evidence at trial does not establish that it did so in Mr. Lalani's case.
- [288] In this regard, I note the case of *White v. Stonestreet*, 2006 BCSC 801, in which this Court explained the concerns with such reasoning:
- [70] The basis for the opinion of the plaintiff's experts on the issue of causation essentially came down to the proposition that since the plaintiff did not have lower back pain before the accident, but developed lower back pain after the accident, the accident must have been the cause.
- [74] The inference from a temporal sequence to a causal connection, however, is not always reliable. In fact, this form of reasoning so often results in false conclusions that logicians have given it a Latin name. It is sometimes referred to as the fallacy of *post hoc ergo propter hoc*: "after this therefore because of this."
- [75] In searching for causes, a temporal connection is sometimes the only thing to go on. But if a mere temporal connection is going to form the basis for a conclusion about the cause of an event, then it is important to examine that temporal connection carefully. Just how close are the events in time? Were there other events happening around the same time, or even closer in time, that would provide an alternate, and more accurate, explanation of the true cause?
- [Emphasis added.]
- [289] When seeking to rely on a temporal connection as a basis for a causal connection, the Court in *White* raises the question of how closely the events are related in time. Mr. Lalani was diagnosed with OSA in 2013, decades after completing his cervical headgear treatment. His only symptoms prior to 2010 were fatigue and irritability, which are not unique symptoms to OSA. He has not established that he had OSA prior to 2013.

- [290] In *White*, the Court was not satisfied, on a consideration of all the evidence, that the plaintiff had met the onus upon him to demonstrate causation. I come to a similar conclusion here.
- [291] I find that Mr. Lalani's fatigue symptoms and irritability as a teenager have not been established to have been caused by his use of cervical headgear. Temporally, Mr. Lalani's use of cervical headgear is unconnected to the onset of Mr. Lalani's OSA more than two decades later. There is simply insufficient evidence of a temporal, medical, or other connection between Mr. Lalani's use of cervical headgear and the onset of his OSA in 2013 to establish causation at common law.

DAMAGES

- [292] Having found that Mr. Lalani has not proven that Dr. Lear's treatment of him was negligent, or lacking informed consent, it is unnecessary for me quantify Mr. Lalani's losses. Nevertheless, I will briefly address this issue.
- [293] Mr. Lalani has not proven entitlement to non-pecuniary losses. Mr. Lalani makes no claim for the cost of future care given the outright success of his self-treatment through the development and use of his Brace.
- [294] With respect to loss of past and future income, Mr. Lalani claims more than \$100 million. Even had Mr. Lalani proven Dr. Lear's negligence, including causation of his OSA, I would not have found that Mr. Lalani had proven these income losses, or any income loss at all.
- [295] Mr. Lalani's claim for income loss is based entirely on what he argues are his missed opportunities to succeed as a venture capitalist. He submits that, despite his strong academic performance in his master's program at McMaster University, he has been unable to remain competitively employable in the venture capital business which he blames entirely on his morning fatigue. He argues that his inability to attend meetings on time, remain awake at work, concentrate in the morning hours, and generally be a reliable colleague and investor, was all due to OSA prior to 2013. In 2013, he largely left the venture capital world. He argues that, while his OSA is now resolved, re-entering the venture capital world at the age of 46 would be "starting from scratch" and "not feasible".
- [296] In quantifying this loss, Mr. Lalani relies on the report of economist Darren Benning, who produced his report based on venture capital income data from an expert report submitted by Mr. Dost. Mr. Dost was qualified as an expert in venture capitalism, able to opine on venture capital work and earnings, generally, but not in matters of the labour market or actuarial analysis. On the basis of Mr. Dost and Mr. Benning's evidence, Mr. Lalani submits that the present value of his past loss is over \$30 million dollars and that and his future without-incident income loss is over \$75 million.

- [297] The defendant takes issue with this assessment, noting that Mr. Lalani was not fired from his venture capital-related jobs, but rather left these jobs voluntarily. Moreover, Mr. Lalani admitted that he concealed his fatigue-related issues from his employers and did not ask for accommodations in respect of those issues until he started working for Mr. Goodman, who has accommodated Mr. Lalani's unusual work schedule precisely because he is so productive outside of regular office hours. The defendant also argues that there is a lack of evidence as to the success of any of the start-up companies with which Mr. Lalani was involved in, nor in relation to the success of the venture capital firm, Trivaris, where he briefly worked with in 2008.
- [298] I am not persuaded that Mr. Lalani has established an entitlement to past or future income loss. There is no evidence to suggest he would have earned more than he currently does had he stayed at Trivaris after 2008. It is not even apparent if Trivaris is still an extant venture capital firm, and Mr. Lalani provided no evidence as to whether that firm was or has been successful since 2008, or what its employees are earning. While he called the former Director of Marketing at Trivaris, Ms. Porter, as a witness, he did not elicit from Ms. Porter any evidence regarding how much longer Trivaris continued to operate, whether it is still operating, or the earnings of herself or others at the firm. Nor did he ask about her current salary or occupation. I find that if Ms. Porter's evidence was likely to help Mr. Lalani establish his claims for lost or future income, he would have adduced it.
- [299] Instead, Mr. Lalani relied solely on the abstract and more theoretical report produced by Mr. Dost about salary bands and earnings for various American venture capital firms.
- [300] Mr. Lalani was not fired or let go from Trivaris. While he may have left for good reason, I am not convinced that he was required to do so. In any event, Mr. Lalani continued to work in the venture capital space after he left Trivaris for some time, experiencing some success on certain ventures, while others failed apparently of their own accord. His evidence does not establish to the requisite standard that he would have had greater financial success with any of these specific ventures than he in fact had due to his fatigue.
- [301] The evidence suggests that Mr. Lalani had wound up or abandoned much of his venture capital work by or about 2011, when he began working with and being mentored by Mr. Goodman in the real estate development and lending sector. My impression of his work for Mr. Goodman is that Mr. Lalani's success with Mr. Goodman's group of companies is due to his entrepreneurial approach, and his ability to find unconventional solutions to difficult problems through sheer persistence and out of the box thinking.
- [302] I agree with the defendant that Mr. Dost's report about career stages and earnings in American venture capitalism firms does not provide helpful evidence to this Court pertaining to Mr. Lalani's alleged income loss. This is in part due to his assumption that in the high-risk/high-reward world of venture capitalism, Mr. Lalani would not have succumbed to any of the risks and would have reaped all the available rewards. It is also due to the fact that his report is based on US data and is not related to Canadian salaries or

career progressions during the pertinent timeframes.

- [303] Nor am I satisfied that the positive contingencies applied by Mr. Benning that substantially increase his estimated loss, are established on the evidence. I also find that insufficient negative contingencies are applied to these calculations, particularly given the highly speculative nature of the earnings they are based on. Finally, Mr. Benning's accounting of Mr. Lalani's actual earnings seems to relate only to the income he has declared for tax purposes since 2008, rather than of Mr. Lalani's corporate earnings through his personal corporation Olalani Consulting Ltd, which are not considered. I am unable to accept this evidence as complete evidence of Mr. Lalani's actual past earnings.
- [304] On the evidence before me, which provides scant support for the financial viability of his venture capitalism projects prior to 2011, Mr. Lalani has not proven he would have had greater or more reliable income in a venture capitalism career than he has had in his current career. Mr. Lalani's testimony indicates that he expects his involvement in Mr. Goodman's group of companies to continue to grow. Furthermore, now that his health has greatly improved, should he wish to go back to venture capitalism, there is no evidence that Mr. Lalani is prevented from doing so because he is in his mid-forties.
- [305] Mr. Lalani has provided no other basis for valuing his loss. His current income is not insubstantial, and he also earns corporate income. On the evidence before me, I find that Mr. Lalani has failed to establish a claim for past or future income loss.
- [306] Mr. Lalani also argues that he should also be awarded \$685,000 for the development of his Brace, which he says includes the cost of his time, travel, materials, suppliers, manufacturers and consultations with engineers, doctors, and others. However, none of that evidence was before me at trial, and instead a lump sum amount was simply suggested in his final submissions. Even had Mr. Lalani established a breach of the standard of care or causation, there is no evidentiary foundation for such an award in relation to Mr. Lalani's costs to develop the Brace.

CONCLUSION

- [307] Mr. Lalani has not established that Dr. Lear breached his standard of care by using cervical headgear to treat his buck teeth and Class II malocclusion in 1989. Nor has he established that Dr. Lear did not obtain his informed consent to proceed with this treatment based on known risks of that treatment at that time.
- [308] Mr. Lalani has also not proven that his headgear caused him to develop OSA at the time of his treatment, or more recently.
- [309] Finally, Mr. Lalani has not proven that he would have earned substantially more than he has since 2008 had he not had headgear as a child.
- [310] Mr. Lalani's claim against Dr. Lear is dismissed.

"Marzari J."

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