Optometrist, Mr A

Optometry Clinic

A Report by the

Deputy Health and Disability Commissioner

(Case 15HDC01684)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Table of Contents

Executive summary

1. On 15 October 2015, Ms B (aged 55 years at the time) consulted optometrist Mr A at an optometry clinic (the clinic) for a routine eye examination.

2. Ms B told Mr A that she was having difficulty with her right eye, and that it felt as if a hair was irritating it. Mr A recorded that Ms B's eye had felt this way for the past month, and had not changed shape, size or colour.

3. Mr A used a light to examine Ms B's right eye. He said that Ms B's vision was clear, and there was no vitreous dust[1] and no monocular colour defect.[2] Mr A recorded: "[H]orizontal solid floater[3] centre [right vitreous, left vitreous clear] …" Given his clinical findings, Mr A decided not to dilate[4] Ms B's pupil. Mr A did not provide any follow-up advice, but prescribed Ms B with a new pair of long-distance glasses.

4. On 20 October 2015, Ms B returned to collect her glasses and spoke with dispensing optician Ms C. Ms B asked for her records, as she wanted a second opinion. Ms B did not see Mr A or another optometrist at the clinic that day.

5. The following day, Ms B re-presented to the clinic and asked Ms C for a letter written by Mr A so that she could take it to get a second opinion. Ms C contacted another optometry practice (clinic 2), and the optometrist there saw Ms B immediately. The optometrist dilated Ms B's pupil and diagnosed a retinal detachment.[5] Ms B was referred urgently to the public hospital and underwent surgery on 23 October 2015.

Findings

6. By not recognising that a dilated pupil examination of Ms B's right eye was indicated on 15 October 2015, and by not providing appropriate follow-up advice to Ms B in the event that she experienced further deterioration in her right eye, Mr A failed to provide services to Ms B with reasonable care and skill, and breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).[6]

7. The clinic did not breach the Code.

Recommendations

8. In my provisional opinion, I recommended that Mr A provide a written apology to Ms B. Mr A did so, and his apology has been forwarded to Ms B.

---

[1] Pigment cells or blood released during the formation of a retinal tear, also known as Schaffer's sign.
[2] Colour vision deficiency in either eye.
[3] A floater is a spot in a person's vision. They are common and can vary greatly in appearance, including presenting sometimes as thread-like strands, fine cobwebs or dull shadows. In most circumstances, they are harmless but it is important to rule out complications such as a retinal detachment or a retinal tear.
[4] Widening the pupil to allow more light in. To do this, eye drops are placed into the eye.
[5] A retinal detachment occurs when the retina (the lining at the back of the eye that senses light coming into the eye) separates from the layer underneath. Without rapid surgical treatment this can lead to vision loss and blindness.
[6] Right 4(1) of the Code states: "Every consumer has the right to have services provided with reasonable care and skill."

9. It is recommended that the optometry clinic use this report as a case study for its optometrists.

10. It is recommended that the Optometrists and Dispensing Opticians Board of New Zealand consider whether a review of Mr A's competence is indicated, should Mr A return to practice.

Complaint and investigation

11. The Commissioner received a complaint from Ms B about the services provided to her by optometrist Mr A at an optometry clinic. An investigation was commenced on 28 April 2016, and the following issues were identified for investigation:

- *Whether Mr A provided Ms B with an appropriate standard of care in October 2015.*
- *Whether the optometry clinic provided Ms B with an appropriate standard of care in October 2015.*

12. This report is the opinion of Meenal Duggal, Deputy Commissioner, and is made in accordance with the power delegated to her by the Commissioner.

13. The parties directly involved in the investigation were:

Mr A	Provider/optometrist
Ms B	Consumer/complainant
Optometry clinic	Provider

14. Information was reviewed from:

Ms C	Provider/dispensing optician
Clinic 2	Provider/optometry clinic
District health board	Provider

15. Independent expert advice was obtained from optometrist Greg Nel (**Appendix A**).

Information gathered during investigation

Consultation — 15 October 2015

16. On 15 October 2015, Ms B (aged 55 years at the time) consulted optometrist Mr A at the clinic for a routine eye examination. Mr A was a contractor at the clinic.[7]

[7] At the time of these events, Mr A was a member of the Optometrists and Dispensing Opticians Board of New Zealand.

17. Ms B said that she told Mr A that she was having difficulty with her right eye and that it felt as if "a hair or something was irritating [her] eye".

18. Mr A told HDC that he noted that Ms B's eye had felt this way for the past month, and had not changed shape, size or colour. He recorded in Ms B's clinical notes: "[Right eye] blurry [constantly] now all distances … feels as if hair in eye … past month not changed …" Ms B said that she also told Mr A that her father had glaucoma in one of his eyes, and asked for a thorough check for this in the examination. She said that Mr A checked and told her that she did not have glaucoma. Mr A recorded: "[D]ad glaucoma from 60's."

19. Mr A used a light to examine Ms B's right eye. He told HDC that Ms B's vision was clear (visual acuity 6/5),[8] and there was no vitreous dust,[9] and no monocular colour defect.[10] Mr A considered that the cause of the irritation was a solid string in the vitreous[11] of the right eye, and recorded: "[H]orizontal solid floater[12] centre [right vitreous, left vitreous clear] …" Mr A told HDC that he explained to Ms B that a solid string in the vitreous will not go away, but that the brain usually ignores it after time. Mr A also told HDC that given his clinical findings, he ruled out the need to dilate[13] Ms B's pupil and conduct further examination, stating: "If I was not convinced that I had found the cause for her symptoms, then I would have dilated as per normal optometry protocols."

20. Ms B said that Mr A advised her that the problem was a hair covered with a thicker layer of gel. She asked about getting it removed, but Mr A told her that "if they sucked it out [she] would go blind". Mr A told HDC that a vitrectomy[14] is not without risks, but going blind would not be one he mentions.

21. Ms B told HDC that she had hit her head during an earthquake drill on the day of the consultation, but she does not recall whether she told Mr A. Ms B also said that she had experienced a fall prior to this (approximately two months earlier). In response to the "information gathered" section of the provisional opinion, Ms B said that she explained to Mr A that she had fallen two months previously, hitting her head and breaking a tooth.

22. This history was not recorded by Mr A. Mr A told HDC that Ms B did not tell him that she had hit her head, and that he would have recorded this if she had. Mr A said that this would also be a normal question he would ask when presented with similar

[8] Visual acuity 6/5 indicates better than normal vision. It shows that the tested eye can discern at a distance of six metres what the normal eye can discern at five metres.
[9] Pigment cells or blood released during the formation of a retinal tear, also known as Schaffer's sign.
[10] Colour vision deficiency in either eye.
[11] A clear, gel-like substance within the eye.
[12] A floater is a spot in a person's vision. They are common and can vary greatly in appearance, including presenting sometimes as thread-like strands, fine cobwebs or dull shadows. In most circumstances, they are harmless, but it is important to rule out complications such as a retinal detachment or a retinal tear.
[13] Widening the pupil to allow more light in. To do this, drops are placed into the eye.
[14] Surgical removal of the vitreous gel from the middle of the eye.

symptoms, although he cannot recall whether he specifically asked Ms B whether she had hit her head recently.

23. Mr A prescribed Ms B a new pair of long-distance glasses as Ms B's previous pair had broken.

24. The clinic told HDC that it has a patient handout that describes floaters and flashes, and retinal detachment.[15] The handout states:

> "If you suddenly notice floaters or experience a sudden increase in floaters or develop flashing lights, these are warning signs which need prompt examination. It is important to see an optometrist quickly in order to evaluate whether the cause is a torn retina[16] or retinal detachment. Most people who experience flashes or floaters never develop a retinal detachment but do need prompt examination."

25. Ms B's clinical notes do not reference the provision of this handout or any other follow-up advice. The notes state: "[R]ecall 15/10/17." Ms B told HDC that she was not given any follow-up advice, and did not receive one of these handouts. Mr A could not recall giving Ms B a handout, but said that his usual practice was to inform patients with symptoms such as Ms B's of potential complications and to hand out the pamphlet. Mr A said: "As [Ms B] returned five days later with worsening symptoms I suspect that I did both those things." Mr A also told HDC that his normal practice is to document follow-up advice and to make a note of pamphlets given.

20 October 2015

26. On 20 October 2015, Ms B returned to the clinic to pick up her glasses.

27. Ms B told HDC that she asked the practice manager, dispensing optician Ms C, whether she could see Mr A because she was concerned about her eyesight, but was told that he was not in. Ms B said that she asked for her records to get a second opinion, and Ms C checked the records and said: "It's only a floater." According to Ms B, Ms C also said: "[Mr A is] the best and knows what he's doing. You don't need a second opinion."

28. Ms C told HDC that she checked the notes and saw that Mr A had recorded that there was a floater in Ms B's eye. Ms C told HDC that she did not say "it's only a floater", and that Ms B did not ask to see Mr A again, and Ms C did not tell her that Mr A was not in. Ms C said that their main conversation was about Ms B wanting a copy of her records and a referral letter so that she could get a second opinion. Ms C said she told Ms B that she would get Mr A to do this, and asked whether she would prefer to return to collect the letter the next day, or would like Ms C to post it to her.

29. Ms C denied stating that Mr A was "the best and knows what he's doing", but said that she reassured Ms B that Mr A was a very experienced optometrist. An addendum

[15] A retinal detachment occurs when the retina (the lining at the back of the eye that senses light coming into the eye) separates from the layer underneath. Without rapid surgical treatment this can lead to vision loss and blindness.
[16] Retinal tears and holes are small breaks in the retina.

to the notes dated 4 November 2015 records that on 20 October 2015 Ms B asked for a report to take for a second opinion on her right eye. It is recorded that on 4 November 2015, Ms B said that she wanted the second opinion because her vision had become cloudier.

Examination at clinic 2 — 21 October 2015

30. On 21 October 2015, Ms B returned to the clinic because she was still concerned about her eye, and a colleague had recommended that she get a second opinion. Ms C told HDC that she told Ms B that Mr A was not in as they do not have an optometrist working on a Wednesday. Ms C said that she immediately telephoned another optometry practice in the area and explained the situation, and clinic 2 said that they were able to see Ms B straight away.

31. The locum optometrist at clinic 2 recorded:

> "[Ms B] presented to our clinic with blurry vision in the [right] eye that had been getting progressively worse over the past 3 weeks. It was now at a point where she noticed a curtain like effect superiorly that is occluding her central vision …"

32. The optometrist dilated Ms B's right eye, diagnosed a retinal detachment, and referred her urgently to the public hospital for surgery.

Surgery at the public hospital

33. On 23 October 2015, an ophthalmologist performed surgery to repair the retinal detachment with vitrectomy, oil and laser. Ms B told HDC that she has not regained her sight, and now has 20 percent vision in her right eye.

Meeting with Mr A — 4 November 2015

34. On 4 November 2015, Ms B, together with a friend, met with Mr A. Ms B said that Mr A admitted that he should have dilated her pupil for the examination.

35. Mr A told HDC that he did not say that he should have dilated Ms B's pupil at this time, because he was satisfied that there was no vitreous dust and no monocular colour defect, and her vision was clear.

36. Mr A said that he reimbursed Ms B for the clinic 2 consultation and provided her with a copy of her consultation records. In response to the "information gathered" section of the provisional opinion, Ms B said that Mr A never gave her a copy of her consultation records.

Further information

The clinic

37. The clinic said that it does not have written policies that would be relevant to this particular instance, as taking a history, examination and decision-making regarding the need for a referral are matters of professional judgement.

38. The clinic told HDC that it has used this case to highlight to its optometrists "the importance of completing a full examination and ensuring that even the rarest diagnosis does not exist in a patient who is considered low risk".

Mr A

39. The clinic said that Mr A was a contractor at the clinic for a number of years, and that it never had any concerns about Mr A's competence. The clinic stated that "this episode appears to be an uncharacteristic lapse by Mr A, out of keeping with his usual high standard of practice".

40. Mr A told HDC that he accepts that he should have dilated Ms B's pupil to ensure a better view of her peripheral retina, and "will forever remain concerned" that he failed to do so. Mr A said that he is fully prepared to apologise to Ms B.

41. Mr A said that, at the time, he thought that what he was doing was appropriate given the history relayed to him.

Responses to provisional opinion

42. Mr A, Ms C and the clinic told HDC that they accept the findings of the provisional opinion. Mr A reiterated his regret that this event occurred.

Opinion: Mr A — Breach

43. On 15 October 2015, Ms B presented to the clinic for a routine eye examination.

History and assessment

44. Ms B complained of an irritation in her right eye that felt like a hair.

45. Mr A used a light to examine Ms B's right eye. He noted that Ms B's vision was clear, and that there was no vitreous dust and no monocular colour defect. Mr A did not dilate Ms B's pupil, as he did not consider it necessary. He considered that the cause of the irritation was a solid string of vitreous in the right eye.

46. Ms B told HDC that on the morning of the consultation she had hit her head, but she was unsure whether she had told Mr A about this event. Ms B also said that she had experienced a fall prior to this (approximately two months earlier). In response to the "information gathered" section of the provisional opinion, Ms B said that she explained to Mr A that she had fallen two months earlier, hitting her head and breaking a tooth. Mr A told HDC that Ms B did not inform him that she had hit her head, and that he would have written this down if she had. There is no record of the fall in the notes. On balance, I consider that Ms B did not inform Mr A that she had hit her head on the day of her consultation. Taking into consideration the information available, I am unable to make a finding in respect of the earlier occasion.

47. My expert advisor, optometrist Greg Nel, advised that Mr A's history-taking was "adequate and at a standard of accepted practice", and noted that while best practice is

to ask questions about head knocks, many optometrists rely on information about head knocks to be volunteered by the patient. I accept this advice.

48. Mr Nel said that Mr A was correct to conclude that he had found a clinical reason for Ms B's symptom, and advised that a "solid string of vitreous is a very plausible cause of her visual changes, and her excellent corrected vision with the absence of Schaffer's sign[17] are all reassuring symptoms".

49. However, Mr Nel considered that Mr A's assessment was not appropriate in the circumstances.

50. Mr Nel advised that the new and constant floater Mr A located was "an indication for a dilated eye examination. Only by dilating Ms B's pupil could Mr A have been in the position to adequately examine the internal eye and peripheral retina and exclude retinal lesions or injury." Mr Nel advised that while there are benign causes of floaters, these are "generally a diagnosis of exclusion", and an undilated examination is not generally regarded as adequate to examine the peripheral retina properly for retinal degenerations, holes or tears, all of which increase the risk of retinal detachment.

51. Mr Nel said that were he to rate the severity of the departure, he would consider it at least a 3.5 out of 5, where 5 is most severe. Mr Nel advised:

> "[Mr A] should have known that the source of [Ms B's] visual disturbance was in the posterior segment of her eye and that his obligation in the [New Zealand Optometrists and Dispensing Opticians Board's Standards of Clinical Competence for Optometrists[18]] was to examine the posterior segment adequately. He should have realised that in this situation he should give himself the best opportunity to examine the back of [Ms B's] eye and a dilated fundus[19] examination is required for this. Optometry is a diagnostic profession and the adequate use of the appropriate diagnostic drugs is a professional obligation. [Mr A] chose not to use the appropriate diagnostic drug and so doing significantly increased his chances of missing a retinal tear and the precursors to a retinal detachment."

52. I accept Mr Nel's advice. I acknowledge that Mr A was not aware that Ms B had hit her head on two previous occasions, and that his decision not to dilate Ms B's pupil was influenced by his clinical findings, including the solid string of vitreous in Ms B's right eye. However, Ms B's symptoms indicated the need for a dilated pupil examination. Without this, Mr A could not exclude the possibility of retinal injury, and I am critical that he chose not to conduct this examination. I note that Mr A now accepts that he should have done this.

Follow-up advice

53. Ms B told HDC that she was not given any follow-up advice on 15 October 2015, and did not receive the clinic's patient handout on floaters, flashes and retinal detachment.

[17] A type of retinal pigment.
[18] Effective from 1 December 2010. See Task 3 — Examination of the eye and visual system.
[19] The interior lining of the eyeball, including the retina, optic disc and the macula.

Mr A could not recall giving a handout to Ms B, but said that his usual practice was to inform patients with symptoms such as Ms B's about potential complications and to hand out the pamphlet. He told HDC that given that Ms B returned five days later with worsening symptoms, he suspected that he did both those things. Mr A said that it is his normal practice to document follow-up advice and to make a note of pamphlets given. However, there is no record in the clinical notes that Ms B was given a handout or other follow-up advice.

54. On the basis of the information available, I consider it more likely than not that Ms B did not receive the relevant patient handout, or any other follow-up advice.

55. Guided by Mr Nel's advice, I consider that Mr A ought to have provided clear follow-up advice to Ms B to return promptly (within the same day) if she experienced any further deterioration. According to Mr Nel, "[t]his advice usually includes noticing 'more or different' floaters, flashes of light and in particular a curtain obstructing part of the vision". I consider that this could have included providing Ms B with one of the clinic's patient handouts on floaters, flashes and retinal detachment.

Conclusion

56. By not recognising that a dilated pupil examination of Ms B's right eye was indicated on 15 October 2015, and by not providing appropriate follow-up advice to Ms B in the event that she experienced further deterioration in her right eye, Mr A failed to provide services to Ms B with reasonable care and skill, and breached Right 4(1) of the Code.

Opinion: Optometry clinic — No Breach

57. The clinic has a duty to provide services that comply with the Code. In addition, under section 72(3) of the Health and Disability Commissioner Act 1994 (the Act), employing authorities can be found vicariously liable for any breach of the Code by an agent.

58. At the time of these events, Mr A was a contractor for the clinic. The clinic said that it does not have written policies that would be relevant to the events in question, because taking a history, examination and decision-making regarding the need for a referral are matters of professional judgement. Mr Nel advised that he did not consider it appropriate for an employer to include such specific guidelines, as these are detailed comprehensively in the Standards of Clinical Competence for Optometrists developed by the New Zealand Optometrists and Dispensing Opticians Board. Mr Nel advised that "[t]hese standards are a minimum obligation for practising optometrists and are fairly comprehensive". I accept Mr Nel's advice. I consider that Mr A's failure to recognise that pupil dilation was indicated was an individual clinical failure.

59. In my opinion, the clinic did not breach the Code.

Opinion: Ms C — Other comment

60. On 20 October 2015, Ms B attended the clinic to collect her prescription glasses. She was seen by dispensing optician Ms C. Ms B and Ms C have provided different accounts of their conversation.

61. Ms B told HDC that she asked Ms C whether she could see Mr A because she was concerned about her eyesight, but was told that he was not in. Ms B said that she asked for her records so that she could get a second opinion, and Ms C checked the records and said: "It's only a floater." According to Ms B, Ms C also said, regarding Mr A: "He's the best and knows what he's doing. You don't need a second opinion."

62. Ms C acknowledged that she reviewed the notes made by Mr A on 15 October 2015 and saw that Mr A had noted that there was a floater present. Ms C told HDC that she reassured Ms B that Mr A was a very experienced optometrist. However, Ms C said that Ms B did not ask to see Mr A, and she did not tell Ms B that he was not in.

63. I am unable to determine what was said during this conversation. I acknowledge that Ms C arranged for Ms B to be seen at clinic 2 when Ms B re-presented to the clinic the following day.

Recommendations

64. In my provisional opinion, I recommended that Mr A provide a written apology to Ms B. Mr A did so, and his apology has been forwarded to Ms B.

65. I recommend that the clinic use this report as a case study to remind its optometrists of the importance of conducting a dilated pupil assessment when presented with floaters or flashes to rule out the risk of retinal deterioration, tears or holes, and provide evidence to HDC of this having occurred, within three months of the date of this report.

66. I recommend that the Optometrists and Dispensing Opticians Board of New Zealand consider whether a review of Mr A's competence is indicated, should Mr A return to practice.

Follow-up actions

67. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the Optometrists and Dispensing Opticians Board of New Zealand and the district health board, and they will be advised of Mr A's name.

68. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the New Zealand Association of Optometrists and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent optometrist advice to the Commissioner

The following expert advice was obtained from optometrist Greg Nel on 2 March 2016:

> "I have been asked to provide an opinion to the Health and Disability Commissioner on case number C15HDC01684, and have read and agree to follow the Commissioner's Guidelines for Independent Advisors.
>
> I qualified in South Africa at the School of Optometry at the Witwatersrand Technikon in 1988 and became a member of the British College of Optometrists in 1991. I have worked and lived in New Zealand since 1997 and I was therapeutically endorsed in 2003 after completing the TAPIOT course at the Department of Vision Science at Auckland University. I have worked as an external examiner for the Department of Vision Science several times and done practice assessments as a member of Practitioner Assessment Committees for the Optometrists and Dispensing Opticians Board. From time to time I also evaluate self-audits undertaken as part of the accreditation process for practitioners to work as CAA accredited optometrists, a scheme administered by the New Zealand Association of Optometrists.
>
> I work in private practice in a multi practitioner optometric practice. This is a mix of general optometric work as well as some more specialist areas including the fitting of specialist contact lens designs, contract diabetic retinal photo screening clinics, dry eye clinics and some acute patients.
>
> The referral instructions from the Commissioner in this case are listed as follows.
>
> 1) Taking into account the symptom history recalled by [Ms B] in her complaint and subsequent communication, was an adequate history taken and recorded by [Mr A] at the consultation of 15 October 2015?
> 2) Was the assessment performed by [Mr A] appropriate to the history provided? In particular, was there any indication to dilate [Ms B's] pupil to optimize the view of her retina, or to formally assess her visual fields?
> 3) Was the vitreous abnormality a reasonable diagnosis for [Ms B's] symptoms? At the consult of 15/10/15 were there any indications to refer [Ms B] for Ophthalmology review?
> 4) Do you believe [Mr A] failed to diagnose the retinal detachment on 15/10/15?
> 5) Follow-up listed as 'recall 15/10/17'. Was this satisfactory follow-up advice given the clinical scenario presented? Would you expect provision of 'safety netting advice' (e.g. go to seek urgent review should there be further deterioration in vision) to have been provided and documented in this circumstance?
> 6) Do you have any additional comments on this case, including the provider responses?
>
> I have reviewed the following sources of information in the formation of this opinion:
>
> 1 The letter of complaint from [Ms B]

2 The response from [the clinic]
3 The Clinical Notes provided by [the clinic]
4 The Clinical Notes and correspondence provided by [clinic 2]
5 The [DHB] Clinical Notes

The Background and summary of events:

On 15 October 2015, [Ms B] presented to [the clinic] for an eye examination. She described to [Mr A] an irritation in her right eye that felt like a 'fixed hair'. Initially, [Mr A] could not see anything until he used a light and found a hair that was covered with a thick layer of gel. [Mr A] advises that nothing needed to be done as the brain usually ignores it. He did not think it was necessary for a vitrectomy as there was no vitreous dust, no molecular colour defect and [Ms B's] vision was very clear (6/5).

[Ms B's] visual impairment appeared to arise after a fall about three weeks prior to her first consultation with [Mr A], and she suffered a secondary blow to the head on the day of the consultation. [Ms B] notes that she advised [Mr A] of her fall but did not mention her head injury.

On 20 October 2015, whilst at work [Ms B] noted that she began losing more vision. She was advised by a colleague to seek a second opinion on her right eye. [Ms B] then had a consultation with [an optometrist] at [clinic 2] where she dilated the right eye and found a detached retina inferiorly that appeared to be causing lift of the macula. A tear could be seen in the inferior temporal retina which was assumed by [the optometrist] to be the source of the rhegmatogenous detachment.

[Ms B] was referred to the Ophthalmology Clinic at [the public hospital] for further assessment on 23 October 2015. The examination findings were explained to [Ms B] and she was informed of the retinal detachment in her right eye.

I have been asked to provide my opinion on the following issues:

1 Was the history taken and recorded by [Mr A] during his examination of [Ms B] on 15 October 2015 adequate?

[Mr A] details [Ms B's] primary symptom as described in her letter of complaint (as a hair in her vision). He notes the affected eye that it is constant and that its duration is a month. All are important in forming a preliminary diagnosis and developing a plan for investigations to be performed during the examination. [clinic 2] and [the DHB] both describe a shorter symptom duration but I don't think this difference is significant.

Neither [clinic 2] nor [Mr A] mention [Ms B's] history of her knocking her head. A history of new floaters associated with a head contusion or blunt force injury raises red flags, as pathological causes of floaters are more likely. Best practice would have questions about head knocks included in a thorough case history, however many optometrists rely on this information to be volunteered by the patient.

I believe [Mr A's] history is adequate and at a standard of accepted practice and it is largely in line with that of [clinic 2] except for discrepancy in the duration of the symptoms.

2 Was [Mr A's] assessment appropriate to the history provided? Specifically, was there an indication for him to do a dilated fundus examination or a visual field assessment?

No it was not. A new and constant floater is an indication for a dilated eye examination. Only by dilating [Ms B's] pupil could [Mr A] have been in the position to adequately examine the internal eye and peripheral retina and exclude retinal lesions or injury.

Dilated examinations are not performed at all examinations or on all patients in general optometric practice. A decision to dilate is typically made by considering the patient's risk profile and depends on their presenting symptoms, refractive error, whether they have previously had a dilated examination and how long ago this was last performed. Impediments to viewing the posterior segment of the eye are also a factor in the decision to dilate, including small pupils and cataracts. There is no consensus of how much peripheral retina should be examined in an undilated examination for it to be considered adequate, and this threshold varies between individual practitioners. This being said, it is more difficult to get a stereoscopic view of the undilated retina. Ophthalmology protocols have dilation indicated even when stereoscopically examining the optic nerve in glaucoma, which is generally easily viewed.

An undilated examination is not generally regarded as adequate to properly examine the peripheral retina for retinal degenerations, holes and tears; all of which increase the risk of retinal detachment. [Ms B's] symptoms of a 'hair' are a hallmark sign of vitreous change and most frequently of a posterior vitreous detachment from the retina, a known retinal detachment risk.

The CAA eye examination audit criteria were developed in discussions between the New Zealand Association of Optometrists and the Department of Vision Science at the University of Auckland and can be used as a measure of best practice in this regard. Recommendations in this context are that dilated fundus examinations are performed at a first examination, in patients over 45 years and on indication.[…]

Visual fields are not noted in [Mr A's] notes and presumably were not performed. A visual field examination is an excellent way of documenting the extent of visual field loss but is not routinely done as a primary investigation of floaters, where the priority is to determine the cause of the floater and screen the peripheral retina for injury.

Confrontation field-testing is a reasonably basic visual field screening done as often part of a typical preliminary workup and is able to identify significant visual field loss as a result of retinal detachment. Confrontation fields are normally included in a general optometric examination and they are performed quickly and

easily. This being said, they are not performed by all practitioners all the time, but are a reasonable expectation.

Formal automated visual field testing is most often done to 24 degrees, which this may not document field loss associated with a retinal detachment if it is not extensive. These visual field examinations are most often performed in glaucoma screening and monitoring.

3 Was the vitreous abnormality a reasonable diagnosis for [Ms B's] symptoms? At the consult of 15/10/15 were there any indications to refer [Ms B] for Ophthalmology review?

[Mr A's] internal finding notes are brief but he does describe a 'horizontal solid floater' in a visually significant position. In his response he states that he found a satisfactory clinical reason for [Ms B's] visual symptom (a hair) and I believe this is the case. The clinical diagnosis floater is not diagnostic, it is a description of a clinical sign. Investigating the health status of the internal eye after the formation of the floater is a priority. There are many benign causes of vitreous change that may cause floaters, but some causes are pathological and it is not possible to reliably assess the health status of the eye by examining the floater itself.

The term 'floater' is often used as a proxy for the presence of a posterior vitreous detachment (PVD) and this is presumably what [Mr A] inferred in his notes. There is an acknowledged relationship between vitreous detachments and retinal detachments.

In his response to paragraph 2 of [Ms B's] complaint [Mr A] states that he did not see any vitreous dust. This refers to pigment cells or blood released during the formation of a retinal tear, also known as Schaffer's sign. These cells can be difficult to see, particularly without pupil dilation. Pigment cells in the vitreous are a very suggestive sign but their absence is not a guarantee of normal ocular health and should not be used as a proxy for examining the peripheral retina properly.

The [clinic 2] and [DHB] clinical notes detail the presence of a 'macula off' rhegmatogenous retinal detachment and a retinal tear. [Mr A's] refractive findings and best corrected visual acuity of 6/5 are persuasive evidence of normal macula function at the time of his examination. Her macula had not detached at the time of his examination but it's possible that there may have been a less extensive retinal detachment and likely that there was a retinal tear that went undetected [during] [Mr A's] examination.

A retinal tear is most certainly an indication for referral as is a partial retinal detachment. Referral is also accepted practice if there is any doubt or dilation contra-indicated.

4 Did [Mr A] fail to diagnose a retinal detachment?

It seems from the clinical sequence of events that [Ms B] suffered a PVD, probably as a result of knocking her head. This likely caused a retinal hole as it detached which went undetected by [Mr A] and this later caused the retina to detach to the macula off retinal detachment diagnosed by [clinic 2].

[Mr A] did evaluate [Ms B's] pupil function and found this to be normal which was not the case when she was seen at [the DHB] and presumably at [clinic 2] although they did not make a note of pupil function in their clinical notes. This normal pupil function suggests that the retina was not detached when [Mr A] did his examination.

[Mr A's] undilated examination compromised his position to sufficiently differentiate between a benign and complete PVD, a PVD with a retinal tear.

5 Follow-up listed as 'recall 15/10/17'. Was this satisfactory follow-up advice given the clinical scenario presented? Would you expect provision of 'safety netting advice' (e.g. go to seek urgent review should there be further deterioration in vision) to have been provided and documented in this circumstance?

Two year follow up intervals are a standard in optometry for routine reviews. Practice management software is generally set to default to 24 months and a two year follow up was appropriate only if [Ms B's] eye was stable after a complete PVD and her retina healthy, the completely detached vitreous body poses little further threat to the retina. Many practitioners would have had her return in 12 months for glaucoma screening given her family history and her intra ocular pressures.

I speculate but I suspect that [Mr A] concluded that [Ms B] suffered a benign complete PVD and set the reminder to 2 years presuming no risk, although if he'd forgotten to specify an interval the software may have defaulted to its standard setting of 2 years.

Scaffolding advice to seek urgent (same day) attention if an obvious or dramatic change in vision occurs is generally given after investigating a PVD. This advice usually includes noticing 'more or different' floaters, flashes of light and in particular a curtain obstructing part of the vision. Many practices have handouts to give to patients at this time and many practice support staff are trained to recognize the symptoms and the urgency of the situation. This is recommended advice in any situation where there may be a chance of peripheral retinal pathology or injury. Ideally a note is made that this advice has been given, although in many situations this is done as a concluding conversation with the patient and the clinical record not amended.

An Eye Institute educational meeting in 2014 suggested arranging a review appointment 3 weeks after the initial one where the optometrist is not positive that vitreous has completely detached. I don't believe this protocol to be normal

practice however and most practitioners rely on advising patients to come back urgently if there are sudden changes in their vision.

6 Concluding comments:

[Mr A] was correct to conclude that he found a clinical reason for [Ms B's] symptom of a hair in her vision. A solid string of vitreous is a very plausible cause of her visual changes, and her excellent corrected vision with the absence of Schaffer's sign are all reassuring clinical findings. There are benign causes of floaters but these are generally a diagnosis of exclusion. Posterior vitreous detachments occur commonly between the ages of 45 and 65 and are more common in myopia and in cases of trauma. A significant percentage of people who suffer an acute PVD will present with a concomitant retinal break and a further 2 to 5% of people develop a retinal break after the initial event.

[Mr A's] decision not to dilate [Ms B's] pupil and explore her peripheral retina limited his ability to properly examine her internal eye and retinal periphery and make a conclusive diagnosis. The fact that [Ms B] didn't mention knocking her head is not insignificant. This changed her risk profile substantially and would likely have altered the nature of [Mr A's] examination and likely the final outcome for [Ms B].

Many patients who experience floaters do not have retinal holes but by choosing not to dilate at the time of his examination he was unable to exclude this possibility and so relied on an educated guess which was a departure from the normal standard of care which put her at risk.

I include some information on flashes and floaters available for the public and optometrists from both the NZAO and its associate website 'Save our Sight'. There are many information based international websites that give similar advice to patients, for New Zealand and Internationally."

On 2 March 2016, Mr Nel also advised that if he were to rate the severity of the departure on a scale, it is a 3.5 where 5 is the worst.

On 29 September 2016, Mr Nel provided the following further advice:

"It is quite common for an optometry practice not to have specific guidelines/protocols regarding appropriate assessment of floaters/flashes.

Most employers will have practice manuals, processes or guidelines about how to perform certain tasks in their workplaces but these are almost always limited to administrative or time and motion tasks and responsibilities.

I don't think it is appropriate that an employer include specific guidelines in their guidelines and protocols as these are comprehensively detailed in the 'Standards of Clinical Competence for Optometrists' document developed by the Optometrists and Dispensing Opticians Board. These standards are a minimum obligation for practising optometrists and are fairly comprehensive.

[Regarding the significance of the departure,] [Mr A] is a capable and experienced optometrist and correctly identified the cause of [Ms B's] visual disturbance. His thinking was on the right track in that he looked for cells behind the pupil and he presumably satisfied himself that she was at no risk.

With his experience he should have known that the source of her visual disturbance was in the posterior segment of her eye and that his obligation in the above mentioned guidelines was to examine the posterior segment adequately. He should have realised that in this situation he should give himself the best opportunity to examine the back of [Ms B's] eye and a dilated fundus examination is required for this. Optometry is a diagnostic profession and the adequate use of the appropriate diagnostic drugs is a professional obligation. [Mr A] chose not to use the appropriate diagnostic drug and so doing significantly increased his chances of missing a retinal tear and the precursors to a retinal detachment.

On the severity scale 3.5 is probably lenient."