Medical Report by Dr Alastair H Bint FRCGP

Dated
6th May 2010

Area of Expertise
General Practice

On behalf of the Claimant
Mrs Fiona Brown, litigation friend of Mr Timothy Brown (deceased)

Instructing Solicitors
XXXXXXXXXXX Solicitors,
XXXXXXXXXXX, FY7 6LP
Ref JEA/Brown

Subject
Treatment of a patient with chest pains, who subsequently died of cardiac arrest.

Written by
Dr Alastair Bint, St Lukes Surgery, Warren Road, Guildford, UK, GU13JH
## Contents

<table>
<thead>
<tr>
<th>Paragraph Number</th>
<th>Paragraph contents</th>
<th>Yellow Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>The issues addressed and a statement of instructions</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>My investigation of the facts</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>My opinion</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Statement of compliance</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>Statement of truth</td>
<td>14</td>
</tr>
</tbody>
</table>

## Appendices

<table>
<thead>
<tr>
<th>Appendix Number</th>
<th>Appendix contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My experience and qualifications</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>List of documents I have examined</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>Glossary of technical terms</td>
<td>17</td>
</tr>
</tbody>
</table>
Report

1. Introduction

1.01 The Expert

I am Dr Alastair Halford Bint. My specialist field is General Medical Practice. Full details of my qualifications and experience entitling me to give expert opinion evidence in this case are in appendix 1.

1.02 Summary background of the case

In December 2006, Mr Brown sought help from his General Practitioner (GP) regarding chest pains. He consulted several other GPs of the same practice over the next year and a half. He was advised that the pains were caused by either chest infections or muscular pain. There was no suggestion made that the pains could be angina and no referral was made to a cardiologist for investigation. Mr Brown was not on any treatment for ischaemic heart disease nor to on any treatment for his high blood pressure and high cholesterol. Mr Brown died of a cardiac arrest in June 2008.

1.03 Summary of my conclusions

Mr Brown had several risk factors that put him at very high risk of ischaemic heart disease. In my opinion, Dr Red failed to appropriately refer Mr Brown urgently for further investigation into his chest pains on more than one occasion and this was below a reasonable standard of medical care. Dr Purple failed to admit Mr Brown when reasonable evidence suggested that he was suffering unstable angina and in my view this was below a reasonable standard of care. In all likelihood these breaches in duty of care adversely contributed to his early demise.
1.04 The parties involved

Mrs Fiona Brown litigation friend of Mr Timothy Brown (deceased); former patient of Donald Duck Practice and Claimant.

Drs Yellow, Brown, Pink, Red, Purple; GPs of Donald Duck Practice; Defendants.

1.05 Technical terms and explanations

I have indicated any technical terms in **bold type**. I have defined these terms when first used and included them in a glossary in appendix 3.

2 The instructions and issues raised

2.01 To comment on the standard of care afforded to Mr Brown by his GPs.

3 My investigation of the facts, history of events

3.01 At the time of the following events, Mr Brown was a 44 year old employed male.

3.02 On 1st December 2006, there is a GP record that Mr Brown sought help from his GP regarding chest pains, for the first time. Mr Brown consulted Dr Yellow of Donald Duck Practice and the clinical records of that day state, ‘Chest pains upper, more upper right shoulder, for ecg fasting bloods and review’. There is further comment that ‘cycles to work at hesketh house on exertion.’ The context of the ‘on exertion’ comment is not clear. There is a further clinical note of his blood pressure of 140/90 mmhg, that he smokes 10-19 cigarettes per day and that he has a family history of heart disease (elder brother and father both died of heart disease, when young). Dr Yellow referred Mr Brown to the smoking cessation clinic.
3.03 The blood tests and ECG were performed on the 4th December 2006.

3.04 There is an administration note made by Dr Yellow that the blood tests were normal. It is not clear in the records whether the actual ECG trace from this occasion is present, there is a trace but it is undated.

3.05 On the 12th December 2006 Mr Brown consulted Dr Blue of Donald Duck Practice as he was suffering from, ‘chest pains still right anterior exertion related. ECG nothing abnormal detected bloods cholesterol a little high’. Examination revealed ‘creaky breath sounds’ in his right lower lung and the diagnosis was given as chest infection and he was prescribed amoxicillin antibiotics.

3.06 Mr Brown returned to see Dr Blue on the 21st December 2006 for a review and the clinical notes of that consultation state, ‘has finished abx (antibiotics) feels a lot better chest clear see sos’ (when necessary).

3.07 On the 16th January 2007, Mr Brown again consulted Dr Blue who states in the clinical notes, ‘still exertional pains right chest posteriorly across back.’ Examination findings are crepitations (crackles) in the right lower lung, but it is stated that there was no cough, phlegm or difficulty breathing. He was referred for a chest x-ray and was to then be reviewed.

3.08 There is an administration note in the medical records dated 17th January 2007 written by Dr R Pink noting the chest x-ray was, ‘normal-no action.’

3.09 On the 26th January 2007, Mr Brown consulted Dr R Pink at Donald Duck Practice and the notes state in their entirety, ‘has eased bit but when wakes up back and chest feels tight. Chest clear and CXR (chest x-ray) was fine-?pleurisy now resolving.’ No follow up or further tests are mentioned.
3.10 The next consultation is dated the 20th March 2007 and is a ‘same day urgent appointment’ with Dr M Red of Donald Duck Practice. The clinical notes state, ‘This am awoke with chest pains, similar in past, cough, green spit 3 day.’ Examination findings are recorded as, ‘well, chest clear. Slight tender right anterior chest wall.’ Diagnosis is recorded as chest infection and MSK (musculo-skeletal pain) and he was prescribed doxycyline antibiotics. It was noted that he was currently smoking 15 cigarettes per day and he was referred to the smoking cessation clinic.

3.11 On the 26th March 2007 there is a further same day urgent appointment with Dr Red. The notes record, ‘very much improved, x sleep flat = uncomfortable R mid/lateral. Tightness R chest on walking.’ Examination findings are recorded, ‘well, temp 36.2c , breath sounds = slight creps bibasal’. The impression is stated as ‘post chest infection’ and he was advised to take paracetamol and ‘review next week or sooner.’

3.12 On the 13th June 2007 Mr Brown consulted Nurse Hazel Pink with an eye allergy. There was no mention of any chest pains in the notes of that day.

3.13 On the 15th June 2007, Mr Brown returned to Surgery and consulted Dr Brown with what had then become a bacterial conjunctivitis and he was prescribed antibiotic drops. There was no mention of chest pains.

3.14 On the 2nd August 2007, Mr Brown consulted Dr Pink at Donald Duck Practice. It was noted that he now had a meibomian cyst of his left lower eye lid and he was referred to an Ophthalmologist. There is also a note relating to an update provided to Mr Browns life insurance policy however there is no copy of this in the medical records.
3.15 The next consultation recorded is on the 5th June 2008 with Dr Purple of Donald Duck Practice. Dr Purple states in the medical records, ‘woke with ache left lower ribcage today, settled then while riding bike and running upstairs had an ache across upper chest and then in back, settled now. No cough or sputum, not sick or sweaty, no pain now.’ Examination findings are recorded as, ‘no pain, pulse reg, chest clear BP 144/89, hearts sounds regular.’ Further note was made, ‘some old changes on ECG, check lipids and repeat ECG and review, advised re acute pains.’

3.16 In the signed statement made by Mrs Brown, she makes mention of this consultation between Dr Purple and Mr Brown. She states that ‘Mr Brown was told a mild heart attack may have occurred, but not to worry as the machine was not working effectively that day.’

3.17 The next consultation between a GP and Mr Brown was dated 17th June 2008 with Dr Red. The clinical records state, ‘see before, intrascapular pain, note ECG = ? old infarct and LV strain.’ His risk factors of smoking and high cholesterol are noted, along with is high blood pressure of 144/89. Dr Red has programmed this data into a Framingham risk model to give a 10 year risk of coronary heart disease of 32 % (very high). The plan as stated by Dr Red is, ‘refer vascular clinic for probable statins, advice, monitor BP, ? needs rpt ECG in 2 months, and if chest pains- cardiologist’.

3.18 At 08.22 hours on the 25th June 2008, Mr Brown had a cardiac arrest at home and was taken to Blackpool Victoria Hospital where he was pronounced dead at 09.22 hours that day.

3.19 The post mortem result and Coroner statement confirm that Mr Brown suffered a cardiac arrest due to a heart attack and that this was secondary to coronary artery thrombosis.
4 My opinion

4.01 It is my opinion that Mr Brown was likely to have been suffering exertional angina when he first consulted Dr Yellow on the 1st December 2006. The clinical notes of that day (paragraph 3.02) mention ‘exertion’, but the context is unclear. For that reason, and because it was an initial presentation and I have the benefit of hindsight, it is my opinion that on balance, the actions of Dr Yellow on this occasion, were reasonable. Dr Yellow did request an Electocardiogram (ECG), which was a reasonable decision, although I should however point out that a one off ECG is not a sufficient investigation into possible angina as it only gives a one off reading of the function of the heart and it is not under exertion. If one suspects angina, a patient requires an exercise ECG (known as an exercise tolerance test), when they are put on a treadmill, exercised and the ECG trace is monitored.

4.02 By the 12th December 2006 when Mr Brown consulted Dr Blue it appears that he was suffering exertional chest pain, as stated by Dr Blue in the clinical notes of that day. However, it was an unusual pain in that it was on the right hand side and in the back. This type of pain is not typical of angina which is normally on the left and at the front.

4.03 With hindsight, this pain probably was angina but to give the benefit of doubt, I would say that, on balance, to not diagnose angina or investigate possible angina at this stage, was probably within the bounds of reasonable practice. I will say however, that it is just within the bounds of a minimum standard of care. This is because the history, irrespective of whether there was a chest infection or not, meant that angina was a possibility and could not be reasonably ruled out without further investigation.

4.04 Dr Blue diagnosed a chest infection, which may or may not have also been present, but it is important to note that chest infections do not generally cause exertional chest pain.
4.05 Dr Blue did comment that Mr Brown’s ECG was normal. However, merely commenting that his ECG was normal is not enough evidence to eliminate angina as a cause for his pain. An ECG is just a snapshot in time and is certainly not a way of reliably excluding angina or ischaemic heart disease. The best and simplest way to investigate for possible angina is to refer the patient for an exercise tolerance test via their local rapid access chest pain clinic.

4.06 By 26\textsuperscript{th} March 2007, Mr Brown had consulted Dr Red a couple of times and the notes of that particular day very clearly record exertional chest pain symptoms (‘tightness on walking’). At this stage, it is my view that there is a compelling history of exertional chest pain and in my opinion, even with the benefit of hindsight, this was now highly likely to be angina. When you combine the chest pain symptom with his high cardiac risk factors, namely, smoking, high cholesterol and most importantly his very strong family history of heart disease, it is my view that a reasonable medical practitioner acting with reasonable care should have referred Mr Brown to a cardiologist for an urgent exercise tolerance test. To not do so was, in my opinion, below a reasonable standard of care.

4.07 The longer the delay in referral, the higher the risk was that Mr Brown would go on to have a heart attack. Mr Brown had repeatedly attended the surgery with clear symptoms of exertional chest pains and the cause was repeatedly put down to chest infection. On the occasion Mr Brown consulted Dr Red on the 27\textsuperscript{th} March 2007, he did not have a fever and was ‘well’, and so, for Dr Red to put this down as a possible chest infection, was in my opinion, below a reasonable standard of medical care. Dr Red did not refer Mr Brown for an exercise test or even appear to take reasonable consideration of the symptoms and risk factors, and in this respect it is my opinion that his care was below a reasonable standard.
Had Mr Brown been referred for an exercise tolerance test in March 2007, it would, in all likelihood, have demonstrated ischaemic heart disease and therefore Mr Brown would have received the cardiological intervention that was required, which may have included angiogram and then treatment (angioplasty or stenting). Should he have received this intervention, there is a likelihood that he would not have gone on to have a heart attack and cardiac arrest but a cardiological expert should be instructed to comment on this further.

As an additional point, the clinical notes of 26th March 2007, made by Dr Red, state that Mr Brown had bi-basal crepitations (crackles at both lung bases). Dr Red postulated the cause of this as being ‘post chest infection.’ Clinically, it is impossible for bi-basal crackles to be related solely to a ‘post infection state’ because crepitations are a result of a pathological process which would either signify ongoing infection or signify some other cause. In my opinion, given that Mr Brown had no infective symptoms, it is entirely possible that these bi-basal crepitations were a result of Mr Brown developing pulmonary oedema (fluid accumulation on the lungs) as a result of the strain his heart was under.

An ECG performed later, in June, showed Left Ventricular strain, consistent with the possibility that Mr Brown was suffering a degree of left ventricular failure, a cause of pulmonary oedema. There is no way of now proving this retrospectively, but in my view, it was further compelling evidence of the seriousness of the heart problem that Mr Brown was suffering. Given that Dr Red identified the bi-basal crackles and despite there being a normal chest x-ray result from January 2007, it is my view that the reasonable course of action at that stage would have been to perform another chest x-ray or even to arrange an echocardiogram. To not investigate these crackles further was, in my opinion, below a reasonable standard of care.
4.11 By the 5th June 2008, when Mr Brown consulted Dr Purple, there was now an overwhelming history of exertional chest pain, but crucially this pain had now progressed to Mr Brown awakening with left sided chest pain. In my view, this was now not only clearly representing angina but was also likely to be representing unstable angina, which warranted urgent admission to hospital. Dr Purple spotted that there was a significant ECG abnormality but only referred to it as ‘some old changes’ and may have suggested that it was due to a faulty machine. I have viewed the ECG trace and the trace is of a reasonable quality with no suggestions of any fault. Dr Purple suggested that the ECG needed repeating and in view of the symptoms, this was below a reasonable standard of care because Mr Brown actually warranted urgent hospital admission. By not arranging this, it is my view that Dr Purple acted with below a reasonable standard of care.

4.12 Of equal concern, is the consultation on the 17th June, with Dr Red. In this consult, Dr Red noted that the most recent ECG had changed and suggested this may represent a previous heart attack. Given the progression of chest pain that Mr Brown was suffering and the ECG change, it is very likely Mr Brown was suffering unstable angina and had probably already had a small heart attack. This warranted immediate admission to hospital on that day. It is my view, that to not admit Mr Brown to hospital that day was below a reasonable standard of care and in all likelihood this delay in treatment has significantly adversely affected the outcome. A Cardiology expert should be instructed to comment on this further.

4.13 As a further general point, it is also my view that, given Mr Brown had a very strong family history of coronary heart disease, his high blood pressure and high cholesterol should have been treated when they were first identified back in 2006. Mr Brown had a subsequent Framingham risk calculation of 32%, based on his blood pressure and cholesterol measurements. Anyone with a risk greater than 15% warrants treatment, so Mr Brown was clearly in the treatment category.
4.14 Had his risk factors been treated adequately this may well have altered the course of events in that it would have reduced the likelihood of him developing worsening ischaemic heart disease and coronary atheromatous disease. It is my opinion that by not treating his risk factors, the GPs of Donald Duck Practice provided a level of medical care that was below a reasonable standard.

4.15 To summarise, Mr Brown had several risk factors that put him at very high risk of ischaemic heart disease. In my opinion, to not refer him urgently for further investigation into his chest pains, when he first presented with clear exertional chest pain without obvious cause, was below a reasonable standard of medical care and resulted in below standard treatment, which in all likelihood adversely contributed to his early demise.

5 Statement of compliance

(a) I understand that my overriding duty is to assist the Court in matters within my expertise, and that this duty overrides any obligation to those instructing me or their Clients. I confirm I have complied with that duty and will continue to do so, I am aware of the requirements set out in Part 35 of the Civil Procedure Rules and the accompanying Practice Direction, the Protocol for the Instructions of Experts to give Evidence in Civil Claims, and the Practice Direction for Pre-action conduct.

(b) I have set out in my report what I understand from those instructing me to be the questions in respect of which my opinion as an expert is required.

(c) I have done my best, in preparing this report, to be accurate and complete. I have mentioned all matters which I regard as relevant to the opinions I have expressed.

(d) I consider that all the matters on which I have expressed an opinion lie within my field of expertise.
(e) I have drawn to the attention of the court all matters, of which I am aware, which might adversely affect my opinion.

(f) In preparing and presenting this report I am not aware of any conflict of interest actual or potential save as expressly disclosed in this report.

(g) In respect of matters referred to which are not within my personal knowledge, I have indicated the source of such information.

(h) I have not included anything in this report which has been suggested to me by anyone, including the lawyers instructing me, without forming my own independent view of the matter.

(i) Where, in my view, there is a range of reasonable opinion relevant to the opinions I express, I have indicated the extent of the range in the report.

(j) At the time of signing the report I consider it to be complete and accurate. I will notify those instructing me if, for any reason, I subsequently consider that the report requires any alteration, correction, or qualification.

(k) I understand that this report will be the evidence that I will give, if required, under oath, subject to any correction or qualification I may make before swearing to its veracity.

(l) I have attached to this report a statement setting out the substance of all the facts and instructions given to me which are material to the opinions expressed in this report or upon which those opinions are based.
6 Statement of truth

I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matter to which they refer.

Signed by Dr Alastair Bint

Dated 6th May 2010
Appendix 1

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My experience and qualifications:

I am a full time NHS GP in a practice with a 10,000 patient population and I am a trainer of foundation doctors in General Practice. I am Chairman of the South West Thames faculty of the Royal College of General Practitioners and I sit on the executive committee for postgraduate General Practice education in Kent, Surrey and Sussex. I work as a clinical lead and have sat on the Guildford Practice Based Commissioning board, one of the roles of which is appraising clinical pathways and protocols. I am a commentator for the Royal College of GPs on professional regulatory and medico-legal issues.

With reference to this case, I have extensive experience dealing with patients with ischaemic heart disease and angina. I am a practice lead for coronary heart disease and have appraised General Practice clinical pathways relating to the management of chest pain. I have postgraduate training in Advanced Cardiac Life Support and Accident and Emergency and am very familiar with guidelines relating to cardiac care.

Qualifications:
• MBChB, Bachelor of Medicine and Bachelor of Surgery, Edinburgh, 1998
• DGM, Diploma in Geriatric Medicine, Royal College of Physicians, 2001
• DRCOG, Diploma from Royal College of Obstetricians and Gynaecologists, 2002.
• DFSRH, Diploma from Faculty of Sexual and Reproductive Healthcare, 2002
• FRCGP, Membership of Royal College of General Practitioners, 2003, Fellowship elected 2009.
• MEWI, Membership of Expert Witness Institute 2008.

Memberships:
• General Medical Council number 4546883
• Medical Defence Union number 307265G
• Royal College of General Practitioners number 53602
• Faculty of Sexual and Reproductive Healthcare number D015276
• Expert Witness Institute number 1776
Appendix 2

List of documents examined

Full GP records.

Hospital records from Blackpool Victoria Hospital.

Statement made by Mrs Brown.

Coroner statement regarding cause of death.

Letter of Instruction from Palmer Hodgson and Heyes Solicitors.

Initial report from Consultant Cardiologist Dr C Pumphrey.
Appendix 3

Glossary of terms used

**Infarct**: heart attack

**Framingham risk model**: A risk assessment tool that uses recent data from the Framingham Heart Study to estimate a 10-year risk for “hard” coronary heart disease outcomes (myocardial infarction and coronary death). This tool is computer based and designed to estimate risk in adults aged 20 and older who do not already have established heart disease or diabetes. It is widely used by GPs, and in fact GP’s are contractually incentivised to use it as its use forms part of negotiated payments to GPs under ‘the new contact’.