



Neutral Citation Number: [2019] EWHC 3549 (QB)

Case No: QB-2017-003525

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 19 December 2019

Before :

DAVID PITTAWAY QC

Between:

MRS FRANCES METCALF

Claimant

(on her own behalf and as executrix of the estate of

MR TERENCE METCALF, Mr Metcalf)

- and -

ROYAL DEVON AND EXETER NHS
FOUNDATION TRUST

Defendant

Richard Mumford (instructed by **Slater + Gordon**) for the **claimant**
Laura Johnson (instructed by **DAC Beachcroft**) for the **defendant**

Hearing dates: 11, 12, 14, 15 November 2019

Judgment Approved by the court
for handing down

DAVID PITTAWAY QC:

Introduction

1. This is a claim for damages arising from a negligent failure to diagnose lung cancer. Mrs Metcalf is the widow of the deceased, Mr Metcalf, who brings the claim on behalf of the estate of Mr Metcalf and on her own behalf and on behalf of her grandson as dependants of Mr Metcalf.
2. Mr Metcalf was a retired Mechanical Engineer, who had served in the Royal Engineers and subsequently taught engineering in various colleges. He had also owned and run a boat yard and continued in retirement to remain active in boatbuilding and other engineering activities. He died as result of lung cancer, which had metastasised, on 9 June 2014. He was born on 9 August 1931 and was 82 years old.
3. Breach of duty is admitted. It is admitted that there was a failure to offer Mr Metcalf a biopsy of the lesions identified on a CT scan of 1 November 2009 and a PET scan of 15 December 2009 and a failure to repeat the CT scanning of Mr Metcalf's chest at an interval of 3 months. It is admitted that a biopsy would have demonstrated bronchial carcinoma and the tumour would have been staged as T1b N0 M0 (stage 1a).
4. The pleaded issue between the parties is whether, with a diagnosis of lung cancer having been made, Mr Metcalf would have been offered (and would have undergone) curative treatment which would have avoided the development of the tumour and occurrence of metastases which led to his death on 9 June 2014.
5. In summary, the claimant's position is that Mr Metcalf would, as a question of fact, have been offered and undergone curative surgery or in the alternative curative radiotherapy, which would have avoided tumour progression and metastasis and would have lived to around 31 January 2017, an additional 2.6 years beyond his actual date of death. The defendant's case is that Mr Metcalf would not have been offered either surgery or curative radiotherapy as he would have been considered high risk because of his reduced lung function and co-morbidities. It is also denied that either surgical excision or radical radiotherapy would have been curative.
6. Subject to the court being satisfied on causation and, also being satisfied that the claimant would have lived for a further 2.6 years, quantum has been agreed at £65,000.

Factual Background

7. For ease of reference, I have taken the chronology from the claimant's skeleton argument, which contains relevant extracts from the medical records to which I have been referred to during the course of the trial.
8. Mr Metcalf was, until 2009, in reasonably good health, with some symptoms of chest pain on exertion thought to be related to asthma and/or angina. He had also been diagnosed with COPD.
9. On 14 October 2009 Mr Metcalf developed significant breathlessness and attended his GP, who prescribed antibiotics and prednisolone and noted a forthcoming outpatient review at the hospital.

10. On 21 October 2009 Mr Metcalf was seen in the respiratory clinic at the hospital. A CT scan was planned. Mr Metcalf had undergone pulmonary function testing two days previously, which included the finding that at that stage Mr Metcalf's DLCO was 38% of predicted value.
11. On 1 November 2009 a chest CT scan was performed. This was reported on 5 November 2009 in the following terms:

"There is bilateral centrilobular emphysematous change, particularly in the upper lobes. In addition, there is linear fibrotic scarring and traction bronchiectasis extending from the left hilum into the left upper lobe. Medially within the left upper lobe, this is associated with a 2.2 cm area of soft tissue density in the left paravertebral region. Inferior to this, and also within the left upper lobe there is a further irregular 17mm soft tissue density with some surrounding patchy infiltrates and dilated bronchioles. A more linear area of increased density anteriorly within the left upper lobe extends towards the pleural surface. No further pulmonary parenchymal nodules are seen."

"At both lung bases there is subpleural fibrotic change with honeycombing and some traction bronchiectasis. No pleural thickening, calcification or effusions are seen."

"There is a borderline 10mm subcarinal lymph node but no significant mediastinal or hilar lymphadenopathy."

"Conclusion:

Findings are of widespread emphysematous change with linear fibrotic scarring extending into the upper lobe and some honeycombing at both lung bases. Nodular opacities in the left upper lobe and right upper lobe anteriorly may be inflammatory however neoplasia is also a possibility."

12. On 25 November 2009 Mr Metcalf attended the respiratory clinic and was seen by Dr Lockman, whose letter to his GP following this attendance described the findings on CT and continued:

"I have explained to him that we need to try and ascertain the nature of the nodules. I will discuss his case at the lung MDT meeting next week and decide whether we should press ahead with CT guided biopsy. He is aware that there is a possibility this might be benign, inflammatory or even serious. We are aware that he has had 1 ½ stone weight loss over the last three months and has lost quite a lot of his appetite. Despite this his performance status is 1."

13. Dr Lockman's manuscript note of the attendance recorded:

"Would like to have [biopsy]"

14. On 1 December 2009 Mr Metcalf's case was discussed in MDT and a plan recorded by Dr Lockman for bronchoscopy and a PET scan. On 7 December 2009 the Mr Metcalf underwent bronchoscopy. No malignancy was reported as being seen on the sample taken. On 15 December 2009 Mr Metcalf underwent PET scanning.
15. On 16 December 2009 Mr Metcalf attended the respiratory clinic and was seen by Dr Christopher Sheldon, consultant physician in respiratory medicine, whose letter to Mr Metcalf's GP following this attendance stated the following:

"Mr Metcalf's recent bronchoscopy showed acid fast bacilli in the bronchial washings. We do not have an identity of the organisms yet and I suspect that they are probably an atypical mycobacterium. However in view of the possibility of Mycobacterium tuberculosis I have started him on treatment with Rifater 6 tablets daily, Ethambutol 1000 mg daily and Pyridoxine 10 mg daily. He was seen by Ruth Unsworth and we have been over the possible side effects.

"Mr Metcalf had a PET scan yesterday which I will need to discuss with Dr Spiers. The lesion adjacent to his vertebrae in the left upper lobe may need a needle biopsy in due course."

We will await the identity of his mycobacteria. We will be following him every month and I will be in touch if I have any other results."

16. On 22 December 2009 the PET scan from 15 December 2009 was reported in the following terms:

"Interpretation:

1. The appearances especially the mass in a para-vertebral position suggest neoplasm in the left upper lobe. Other left lung and pleural features may be inflammatory despite high SUVs, considering their short evolution. Follow up of these features is advised for assessment.

2. The right lung feature may be inflammatory rather than neoplastic.

3. The mediastinal features may all be reactive. A follow up study here would also be helpful.

4. No distant deposit is seen.

5. There is a background of chronic lung disease with bronchiectasis and fibrosis."

17. On 22 December 2009 Mr Metcalf's case was discussed in MDT. Dr Sheldon's manuscript note of the discussion recorded:

“PET discussed – see [?long] report. May all be mycobacterial disease. Left paravertebral lesion might be a tumour or inflammatory lesion. Could be biopsied + cultured. Radical Rx (surgery) unlikely in view of PFTs although radiotherapy might be possible

Plan – await cultures + identity of AFBs

Could be Biopsied – discuss with him at next appointment.

Probably repeat CT scan in 3/12”

18. On the same date Dr Sheldon wrote to Mr Metcalf, copied to his GP, in the following terms:

“I hope that you are getting along well with your new tablets. I discussed your recent PET with my colleagues this morning. There are a number of changes in both lungs which are probably all due to inflammation but I will need to keep an eye on these areas and their response to treatment. I would like to discuss the results with you when you next come to clinic. I understand you have an appointment on the 13 January with Ruth Unsworth. Although I have an afternoon clinic that day I should be available to pop down and see you after Ruth has seen you.”

19. On 13 January 2010 Mr Metcalf attended the respiratory clinic and was seen by both Ruth Unsworth, respiratory nurse, and Dr Sheldon. Ms Unsworth’s letter following the clinic stated as follows:

“I reviewed Mr Metcalf in the TB clinic today. His weight was 69.9Kg and his oxygen saturation on air was 93%. Mr Kent [instead of Mr Metcalf] has now completed one month of anti-tuberculous medication. We have now had the result of the geneprobe test which suggests that this isolate is a non-tuberculous mycobacterium. Identification is to follow.

Mr Kent [sic] informed me today that he feels well although he remains short of breath on exertion. He appears to be tolerating the medication well now. He was initially suffering with nausea and flu-like symptoms which have now subsided. He does, however, get an occasional uncomfortable feeling in his stomach and is opening his bowels more frequently than normal. His weight remains stable and he has not experienced any fevers. He has not complained of any blurred vision. However, in view of his history of glaucoma, I have recommended to him that that he should arrange to see his optician in the near future.

Mr Metcalf has been reviewed today by Dr Sheldon, Consultant in Respiratory Medicine, who has recommended that we change his treatment to Rifinah 300, two tablets once daily, Ethambutol 1000mg once daily, Clarithromycin 500mg twice daily and

Pyridoxine 10mg once daily. He has been given a prescription for a one month supply of these tablets today. Dr Sheldon also recommends that his Seretide inhaler is increased to 250, two puffs twice a day and also recommends that he is given Tiotropium 18mcg once daily. We have also repeated his bloods today for urea, renal, liver, GGTP and FBC.

I plan to review Mr Metcalf in the clinic again in four weeks' time but he has my contact details should he have any concerns before then."

20. On 22 January 2010 Dr Lockman wrote to Mr Metcalf's GP stating that Mr Metcalf's recent mycobacterium culture had been identified as growing mycobacterium avium-intracellulare (MAI). The letter noted that Mr Metcalf had already commenced treatment and was to be reviewed by the respiratory nurse in a few weeks' time.
21. Mr Metcalf was followed up sequentially for 18 months in respect of his mycobacterial infection and was shown to have become microscopy and culture negative to these organisms over the next 12 months. There was no monitoring of the SUV positive nodules by CT scanning, as agreed by the MDT meeting which took place on 22 December 2009.
22. On 19 March 2013, Mr Metcalf attended the respiratory clinic and was seen by Dr Sheldon. A recent sputum sample had again grown the organism MAI. Dr Sheldon also commented of an x-ray performed in January 2013 that it showed "*perhaps a little more shadowing when compared with x-rays over the past two to three years.*" A plan was made for review in 6 months with an x-ray.
23. On 2 September 2013 Mr Metcalf attended the respiratory clinic and was seen by Dr Sheldon. Review of x-rays was thought not to show evidence of progressive disease due to MAI. Review was planned in 4 months.
24. In December 2013, Mrs Metcalf noticed her husband was leaning in his chair to the left and his foot was dragging. At that point she suspected that he had suffered a TIA and called the GP, who made a home visit. Mr Metcalf was referred to the Stroke Clinic at the Royal Devon and Exeter Hospital. He was seen at the Stroke Clinic on 18 December 2013 and was noted to be confused, had left facial weakness and left hand weakness.
25. A CT of the brain was arranged and an angiogram carried out. These found that Mr Metcalf had metastatic lesions in the brain. Mr Metcalf was diagnosed with primary lung cancer which had spread to the cervical vertebrae and brain. Mr Metcalf underwent two sessions of radiotherapy for palliative care. He died on 9 June 2014.

Factual Evidence

26. The lay factual evidence consists of witness statements from Mrs Metcalf, who attended the first day of trial, her grandson Mr Metcalf, and a neighbour, Mr Lintell. None of them were called to give evidence and their evidence has been admitted without cross-examination. The statements are primarily concerned with providing background information about Mr Metcalf's life and his descent into ill-health leading to his death

on 6 June 2014, which, I do not propose to rehearse, now that quantum has been agreed, subject to an issue regarding life expectancy.

27. In view of the findings that I have made later in this judgment there is one important passage in Mrs Metcalf's witness statement relevant to whether Mr Metcalf would have agreed to surgery or radical radiotherapy, which was not subject to cross-examination, where she states:

"Terry was never one to sit back and be defeated by illness. He had never been averse to surgery and had he known about his illness in 2009 I know that he would have fought to live. I miss him very much."

28. The treating medical evidence consisted of witness statements from Dr Sheldon, consultant physician in respiratory medicine, and Dr Toy, consultant clinical oncologist, who both gave evidence and were cross-examined, and Mr Froeschle, cardio-thoracic surgeon, who did not attend trial. Late in the day on 28 October 2019, the defendant served a hearsay notice in respect of his evidence on the grounds that he was outside the jurisdiction, in Germany, and was not prepared to attend the trial. Mr Mumford, on behalf of the claimant, did not object to Mr Froeschle's witness statement being admitted, however, he submitted that little or no weight should be placed on it as a result of his non-attendance at trial.
29. Dr Sheldon first saw Mr Metcalf in his clinic on 16 December 2009, when he explained the findings of the bronchoscopy on 7 December 2009. He had already had a previous discussion with Ms Unsworth, the respiratory nurse, on 9 December 2009 when she informed him that acid fast bacilli had been identified in the bronchial washings. Dr Sheldon thought that this could be mycobacterium tuberculosis but was more likely to be an atypical organism in view of the co-existing lung disease and severe COPD. In view of Mr Metcalf's weight loss and potential infection risk, he recommended he should be treated as if it was mycobacterium tuberculosis with the option to change treatment when the organism was identified. Mr Metcalf was started on quadruple therapy for mycobacterial infection. At the consultation the PET scan was not available and Dr Sheldon confirmed that he intended to discuss it at the next Lung MDT meeting.
30. At the MDT meeting on 22 December 2009:

"It was agreed that the sample could be biopsied and cultured and it was decided that this would be discussed with Mr Metcalf at the next outpatient appointment and that it was likely that the management would include a follow up CT scan in 3 months' time."

It was also noted at the time of the MDT meeting that Mr Metcalf's gas transfer (the measurement of the transfer of gas from air in the lung to the red blood cells) was significantly reduced at 38% of predicted and so, if the lesion was a tumour, radical (i.e. curative) treatment with surgery was unlikely to be possible although radiotherapy might be an option."

31. On 13 January 2010 Dr Sheldon saw Mr Metcalf again by which time the bacterium had been analysed as non-tuberculosis. He changed his antibiotic therapy and arranged for him to be reviewed in four weeks. Dr Sheldon accepts that:

“There is no entry to confirm whether I discussed a possible biopsy of the left-sided paravertebral lesion with Mr Metcalf but from memory I decided to treat him for the known non-tuberculosis mycobacterial infection and follow his progress without performing a biopsy.”

32. Mr Metcalf was treated for 18 months for mycobacterium avium intracellulare and had 12 months of negative sputum samples. His weight increased, and his respiratory symptoms improved his condition. Following a review on 14 December 2011 he was discharged from clinic with a request to submit further sputum samples if his cough became productive. Subsequently, he was monitored and a further sputum sample in November 2012 showed evidence of MAI, before he became unwell in December 2013 and his lung cancer was diagnosed.

33. Dr Sheldon regrets that the biopsy was not performed and the follow-up CT scan was not arranged in 2010. I note that he was on sick leave from January to August 2010 which may be relevant to what occurred. He maintains that, if a scan had been performed at three month interval, there would have been no change in Mr Metcalf’s treatment path.

“Based on my experience at that time upon Mr Metcalf being asymptomatic, and as it had been concluded at the Lung MDT that it was unlikely that radical treatment was possible, no treatment for a possible cancer would have been offered unless, or until Mr Metcalf developed symptoms related to the lesion, even if a clinical diagnosis of a probable tumour had been made. The reality is that Mr Metcalf’s symptoms from 2009 until his presentation with weakness in 2013 were almost entirely due to his COPD and infection rather than symptoms attributable to his cancer.”

34. Although failure to undertake a biopsy is now admitted, Dr Sheldon maintained in his witness statement that a CT-guided needle biopsy in the left paravertebral area was a potentially hazardous procedure in a patient with quite severe emphysema, leading principally to a collapsed lung and bleeding, as well as other rarer complications. He accepts that the biopsy would have demonstrated a bronchial carcinoma staged as T1b N0 M0. He says that, in a light of the MDT decision not to support surgery, once the tumour had been identified, Mr Metcalf would have been referred to Dr Toy, for consideration of further treatment.

35. Dr Toy’s evidence is that:

“At the time of these events in 2009, Mr Metcalf was 78 years of age with poor lung function. I note his transfer factor (DLCO – a measurement of a patient’s pulmonary diffusion capacity) was just 38% of predicted, alongside an established diagnosis of atypical infection (MAI) and radiological changes consistent

with pulmonary fibrosis. It would have been the practice of my surgical colleagues to have considered Mr Metcalf unfit for a lobectomy due to these underlying issues. In the event that my surgical colleagues deemed Mr Metcalf an unsuitable candidate for surgery, he would have been referred to me for consideration of alternative forms of treatment.

It would have been my practice at that time (and still is) to consider whether the patient was a candidate for radiotherapy, chemotherapy or both forms of treatment in combination. I would give consideration to the patient's health at that time, but also the patient's likely post treatment condition, and whether the patient would be able to cope with any treatment and still maintain an acceptable quality of life following that treatment. It would also have been my practice to take into account the prognosis from Mr Metcalf's age and underlying medical conditions."

36. Dr Toy would not have offered Mr Metcalf standard conventional radiotherapy over four to six weeks with a DLCO of 38% of predicted, or indeed, Stereo Ablative Body Radiotherapy ("SABR") which would now be available. She considers that either treatment would be contraindicated due to radiological evidence of lung fibrosis. The risk of radiation pneumonitis and progressive fibrosis is greatly increased and can be a life threatening complication. She also considers that the DLCO of 38%, even in the absence of lung fibrosis, would result in an extremely high level of morbidity. In oral evidence Dr Toy said that she had not offered radical radiotherapy to a patient with interstitial lung disease or transfer factor of less than 50%. Mr Metcalf had a central tumour, ignoring the lung fibrosis. She confirmed that she would not have referred Mr Metcalf for SABR which was not available in Exeter in 2009. She referred her first patient for SABR to Leeds in 2011, which was before it was commissioned nationally in 2013.
37. In the absence of symptoms in 2009, Dr Toy does not consider that Mr Metcalf would have been a candidate for chemotherapy, which would have been a palliative treatment designed to improve Mr Metcalf's quality of life. It is perhaps noteworthy that when Dr Toy did write to his GP on 23 December 2013, she said Mr Metcalf's "*past medical history is significant for angina, MAI, COPD and he would not be a good candidate for chemotherapy.*" She states that her preferred treatment would have been to watch and wait, and refer him for palliative radiotherapy when he became symptomatic.
38. Mr Froeschle, consultant thoracic surgeon, retired from the NHS in March 2017 and has returned to Germany. Although he prepared a signed witness statement, as I have said, he did not attend the trial to give oral evidence. Mr Froeschle states that, had Mr Metcalf been referred to him in early 2010, for consideration of the excision of the tumour in his left lung, he would initially have needed to consider whether he was fit enough to undergo surgery with a curative intent, either a lobectomy or a left upper lobe segmentectomy. He would have considered Mr Metcalf's co-morbidities in order to establish the perioperative risk, which included COPD, ongoing mycobacterial infection, probable asbestos and chemical exposure and hypertension. He stated that a recent mycobacterial infection of the lung in itself is an established reason not to consider surgery as the most appropriate treatment option. He would have viewed Mr

Metcalf's lung function (FEV1), pulmonary diffusion capacity (DLCO) and calculated his likely post-operative DLCO at 32% following a segmentectomy and 28% following a lobectomy.

39. Mr Froeschle states that his treatment options would have been based mainly on the European Society of Thoracic Surgeons Clinical Guidelines ("ERS") on fitness for radical therapy in lung cancer patients. He states that Mr Metcalf's predicted values would have fallen below the threshold for lobectomy and pneumonectomy. In his witness statement, he does not refer specifically to segmentectomy. He considers that Mr Metcalf would have been considered too high a risk for surgery with curative intent. He states that Mr Metcalf's lungs were structurally diseased, and it was important to consider the extent of pre-existing damage, as the removal of the tumour and surrounding lung tissue was likely to have an immediate effect where the lung function was already poor. He would have referred Mr Metcalf to Dr Toy to consider non-surgical options.

Claimant's Expert Evidence

40. Mr Lau, consultant thoracic surgeon, gave evidence on behalf of the claimant. He is a consultant at St Bartholomew's Hospital, London and was a registrar in 2010. In his report, Mr Lau identifies Mr Metcalf's co-morbidities, and concluded that, in relation to surgery, significant COPD, angina, hypertension, pulmonary fibrosis and MAI would not have precluded surgery. He states that: *"in Mr Metcalf's history and investigation results, there is no absolute contraindication to surgery, and [he] would have been offered surgery, with the risks and benefits explained."* As a surgeon, he was unable to offer an opinion on radiotherapy. He records that a percutaneous image guided biopsy would have a $\geq 85\%$ chance of confirming lung cancer. The microbiology reports between 1 February 2010 and 23 May 2011 showed no mycobacteria found on the stains or when cultured. Where one stain on 3 March 2011 was found positive on the stain and negative on the culture, a repeat sample on 10 March 2011 was negative on stain and culture.
41. Mr Lau refers to the British Thoracic Society Guidelines ("BTS") and ERS Guidelines recommending that patients with poor lung function should be investigated further to ascertain whether they are able to tolerate a lobectomy, or whether they could be offered a lesser resection such as a segmentectomy or wedge resection. In parenthesis, I should add that Mr Mumford now relies solely on Mr Metcalf being offered a segmentectomy. Mr Lau also relies upon the small tumour being within a damaged, non-functioning part of his lung which would have a smaller impact on Mr Metcalf than the predicted values calculated. He considers that the FEV1 and DLCO would improve following his treatment for MAI, making it likely that the DLCO would have been higher than at the presentation in November 2009. In conclusion he considers that Mr Metcalf was a candidate for surgical excision of the tumour, either a segmentectomy or wedge resection with curative intent.
42. Dr Plowman, consultant oncologist, considers that if surgery had not been offered then radiotherapy would have been offered. He accepts that before the patient proceeded to radiotherapy, the chest physicians would have to be content that a typical mycobacterial infection was under control. He believes that the patient's lung function, although compromised by his COPD was adequate for radical radiotherapy, by either a cyberknife or an intensity modulated radiotherapy technique. He does not consider that

Mr Metcalf's cardiac condition would have been a contraindication for radiotherapy. He acknowledges that a DLCO of 38% is a low transfer factor and "*indeed marginal for any procedure that can further damage lung function*". He advises focal static radiation therapy (SRS), also known as SABR, as a preferred therapy. He considers that more generally available intensity modulated radiation therapy, 60-66 Gy in 30-33 fractions would probably have been recommended, and his spirometry on 27 January 2010 was adequate for this therapy. He considers that he would have had a reasonable four years of life between January 2010 and December 2013 when the brain metastases presented, he believes that the shedding of clone of cancer cells would have been prevented by radical radiotherapy in 2010.

43. Although Dr Steele, consultant oncologist's, report is concerned primarily with breach of duty, he was called to give oral evidence primarily on Mr Metcalf's life expectancy, if an initial diagnosis of lung cancer been made in 2009. He states that most patients with a T1bN0M0 (stage 1A) lung cancer are cured by surgery. Relying on statistical data, he states that Mr Metcalf's life expectancy, as a man of 78 years 7 months, in March 2010 was 9.9 years. He subtracts three years to take account of ischaemic heart disease, COPD and history of heavy smoking. He arrives at a figure of 6.9 years. He considers that if Mr Metcalf had lung cancer surgery in March 2010, he would have lived for a further 6.9 years. In fact, he died on 9 June 2014, aged 82 years 10 months, 4 years 2 months from March 2010.

Defendant's Expert Evidence

44. Mr Steyn, consultant thoracic surgeon, on behalf of the defendant, considers in his report that Mr Metcalf's co-morbidities would be considered high risk. He relied upon significant upper lobe emphysema with bilateral pulmonary nodes, evidence of fibrosis (including honeycombing in the lower lobes) and traction bronchiectasis. He considers that CT guided biopsy, as opposed to diagnostic surgical biopsy, was appropriate. At the time he considers that lobectomy was the preferred curative surgery, lesser resections, such as segmentectomy would be considered by some surgeons for high risk patients. Whilst he considers that surgery could have removed the tumour with curative intent, Mr Metcalf's fitness for surgery would have involved calculating the predictive post-operative pulmonary function considering the extent of the lung resection required and comorbidities. He considers that his measured diffusion capacity DLCO of 38% means that his predicted value post lobectomy 28% or segmentectomy of 32% would have led to a recommendation against surgery.
45. He believes that Mr Metcalf's lung disease was not isolated to a damaged non-functioning emphysematous part of his lungs, but the rest of his lungs were affected by severe COPD, mycobacterial infection and bronchiectatic changes. He considers that the risk of death occurring in the postoperative period or within months thereafter due to the severity of the pulmonary compromise to have been prohibitive. He also did not consider that in the presence of pulmonary fibrosis radical radiotherapy would have been considered. He does note that guidance on assessment for surgery has changed and that now more extensive assessment would be expected with the result that Mr Metcalf may have been subject to a segmentectomy probably by VATS (a keyhole approach) once the MAI had been resolved with treatment. He considers that in 2009 and 2010 surgical treatment was much more predicated on the absolute values of tests and assessment of risks.

46. Dr Falk, consultant clinical oncologist, considers that where patients are considered medically inoperable, some are commonly considered for radical radiotherapy, whilst other oncologists adopt a wait and see approach and refer patients for palliative radiotherapy only when they become symptomatic. In his report he refers to the Cochrane Collaboration and to the fact that distant metastases developed in approximately 25% of patients. He recited the reviewer's conclusions that there were no randomised trials that compared a policy of immediate radical radiotherapy with palliative radiotherapy, however radical radiotherapy appears to result in a better survival than might be expected had treatment not been given.
47. His conclusion, having reviewed the radiotherapy, is that there is evidence of fibrosis in the CT scan of November 2009, showing considerable changes of fibrosis throughout both lungs with honeycombing changes. His view is that the presence of significant fibrosis is a relative if not absolute contraindication for radiotherapy to the lungs. The presence of a paravertebral tumour and its proximity to the spinal cord would require a larger volume of lung to be irradiated. If he had been treated, he would have been at significant risk of life-threatening breathlessness for worsening parenchymal and scarring in both lungs. He does not consider that he was likely to have survived beyond age 83 in 2014.

Experts' Joint Statements

48. In the joint statement, Mr Lau and Mr Steyn, consultant thoracic surgeons, agree that it would have been reasonable for the MDT to consider lobectomy and segmentectomy with curative intent. They also agree that that in 2009/10 a patient would "*in general only be offered the option that an MDT supported*". They agree that lobectomy, segmentectomy and wedge resection, all with curative intent, would have been available at the defendant hospital in 2009/10 in a patient fit enough for surgery. They also agree that resection of the paravertebral lesion with curative intent would have been either a lobectomy or segmentectomy.
49. Significantly, the experts agree that: "*in 2009/10, considering the BTS guidelines 2001 and ERS guidelines 2009, his comorbidities and pulmonary function, a majority of surgeons would not have offered a lobectomy or segmentectomy.*" The position would have altered by 2011 with: "*one of the key changes in the guidance was the increasing acceptance that rather than the professional deciding an acceptable level of risk, that it should be a shared decision with the patient.*"
50. Dr Plowman and Dr Falk agree that if surgery was not considered a safe option then radical radiotherapy would have been considered following treatment of the MAI. Dr Plowman considers that if Mr Metcalf had received a high dose of conventionally fractionated radiotherapy in 2010 there would have been what he describes as a majority chance of local control and later spinal column infiltration by cancer would not have occurred. He considers that SRS or SABR would have delivered a much higher dose equivalent with curative effect. He states: "*that the TLCO (preantibiotic therapy) was very low and unless this improved on antibiotics then any conventionally fractionated radiotherapy dose might have been compromised to less than a full radical dose.*" Dr Falk remains of the opinion that radical radiotherapy would not have been offered to Mr Metcalf because of his comorbidities. He considers that even if he had radical radiotherapy he would not have been cured of his cancer, which is likely to have

relapsed into his brain with him dying in any event in 2014, He also noted the positive sputum sample in 2012 indicating that the MIA had not been eradicated.

51. The joint statement from Dr Steele and Dr Falk adds little to the issues in this case and does not deal with the issue of life expectancy.

Discussion

52. This case is concerned with the hypothetical situation that would have existed had Mr Metcalf been referred for a biopsy in January 2009 and a CT scan by March 2010. The test to be applied was set out by Lord Browne-Wilkinson in *Bolitho v City and Hackney Health Authority* [1997] UKHL 46; the two-stage test, as applied to this case, is: (a) what would the treating clinicians have done had the breach of duty not occurred? And (b) if the treating clinicians had not discussed with Mr Metcalf the option of surgery or radical radiotherapy, would that have been negligent? The *Bolam* test has no relevance to the first of those questions but it is relevant to the second question, however, it should now be considered by reference to the decision in *Montgomery v Lanarkshire Health Board* [2015] UKSC 11. It also raises an issue as to how the case on causation was pleaded in paragraph 29 of the Particulars of Claim.
53. In answering the first question, I consider that the evidence clearly points to Mr Froeschle and Dr Toy advising the MDT that Mr Metcalf was not suitable for surgery or radical radiotherapy in early 2010.
54. Mr Mumford did not object to the inclusion in the evidence of Mr Froeschle's witness statement, however, in the absence of him attending trial for cross-examination, he invites me to give it little weight. There is a significant omission, in my view, in Mr Froeschle's statement. At paragraph 10 he refers to consideration of a lobectomy or segmentectomy and lobectomy. At paragraph 13 he refers to the predicted values after surgery for a segmentectomy and lobectomy. At paragraph 14, however, in applying the European Guidelines, he only refers to a lobectomy or pneumonectomy (which it is common ground did not apply in this case). He makes no further reference to segmentectomy before he concludes in paragraph 17 that he would not have offered surgical excision of the tumour. The omission is significant because, as Mr Mumford pointed out, the European Guidelines indicate that Mr Metcalf was suitable for a segmentectomy. It seems to me that without Mr Froeschle's attendance at court to explain why he has stated that Mr Metcalf was not suitable for a segmentectomy, I should treat the weight I give to his witness statement with considerable care.
55. It is, I believe, common ground that the diagnosis of lung cancer should have taken place sometime in early 2010. In my view, Mr Metcalf should then have been considered for treatment by the MDT, shortly after the diagnosis had been made. It is relevant to the consideration of his treatment that he had a significant number of comorbidities, which were aggravated by the presence of MAI that continued to be treated until June 2011. I am satisfied that Mr Froeschle would not have offered Mr Metcalf the option of surgery with curative intent, in circumstances where the MDT had not recommended that course of treatment. Although, I have expressed reservations about the content of Mr Froeschle's statement, which has not been subject to cross-examination, as I have said, his expressed views are supported by Mr Steyn and Mr Lau, as to what the practice would have been in 2009 or 2010. Mr Steyn acknowledges in his report that thoracic surgical practice has changed significantly since 2009.

56. As already noted, Mr Metcalf was a 78 year old man with significant comorbidities, which were aggravated by the presence of MAI that continued to be treated until June 2011. Although, he would come within the ERC guidelines with a DLCO of 38, I accept that the overall assessment of his health would have led to no such recommendation at that time. It is also consistent with the views of Dr Sheldon and Dr Toy, both of whose evidence I accept, in relation to the consideration that they, respectively, as a consultant respiratory physician and consultant oncologist, would have given to all of Mr Metcalf's co-morbidities, in relation to radical radiotherapy.
57. If Mr Metcalf was considered unsuitable for surgery, then the MDT would have gone onto consider whether he was a candidate for radical radiotherapy. I accept Dr Sheldon and Dr Toy's evidence that the MDT would not have recommended Mr Metcalf for radical radiotherapy because of his age and co-morbidities, including the presence of the MAI. As a result, Dr Toy would not have offered the option of radical radiotherapy to Mr Metcalf, in the absence of a recommendation from the MDT, although she would have discussed it with him. The position of a paravertebral tumour would have resulted in the radiotherapy having to be applied at an angle away from the spinal cord, affecting a larger volume of the lung. I accept Dr Toy's evidence that this is a case where she would have advised Mr Metcalf to wait and see how the tumour developed, which it did slowly over a period of between three and four years before the signs and symptoms began to manifest themselves.
58. If surgery or radiotherapy with curative intent had been instituted, notwithstanding the risks involved, I prefer the evidence of Mr Lau and Dr Plowman, to that of Mr Steyn and Dr Falk, on the issue of whether either course of treatment would have been successful, in eradicating or at the least, in the latter case, slowing the development of the tumour. I found both Mr Lau and Dr Plowman's evidence, particularly the reasoning in their reports, helpful on these issues. If it had done so, then I accept Dr Steele's evidence that Mr Metcalf's life expectancy would have been extended by period of 2 years 6 months, if the lung cancer had been diagnosed in early 2010 and he had undergone treatment either by surgery or radical radiotherapy with curative intent during the first part of 2010. Based upon his clinical experience, it seems to me that he is entitled to come to the conclusion that he reached. It is noteworthy that no alternative figure for life expectancy was put forward.
59. I turn to the second stage of *Bolitho*, namely whether a failure on the part of Mr Froeschle and Dr Toy to discuss with Mr Metcalf the options of surgery or radical radiotherapy was negligent. One of the main issues that developed during the course of the trial was whether, following the decision in *Montgomery v Lanarkshire Health Board [2015] UKSC 11*, the treating clinicians should have explained the full range of treatment options to Mr Metcalf, in circumstances where he had undergone a biopsy in early 2010 revealing the presence of the small lung tumour.
60. The issue raise an uncharacteristic pleading point in a clinical negligence action. The case on causation is pleaded very simply in paragraph 29 of the Particulars of Claim:

“The Claimant's case on causation is as follows:

- (1) If the deceased had been offered biopsy of the suspicious lesion(s) on 13 January 2010, as was the plan indicated in Dr Sheldon's manuscript note of the MDT discussion on 22 December 2009, the deceased would have

chosen to undergo that procedure. Dr Lockman had noted of the deceased on 25 November 2009: “would like to have [biopsy]” and the same would have applied on 13 January 2010. Biopsy would have taken place as soon as possible, and within five working days and would have led to diagnosis of lung cancer within 10 working days at most.

- (2) In the alternative, if repeat scanning had taken place in early 2010, by early March at the latest, this would have demonstrated the continued presence of a suspicious lesion and biopsy would have followed, leading to diagnosis of lung cancer.
 - (3) Under either scenario above the tumour would have been staged as T1bN0M0 (overall stage 1a), the deceased would have been offered, and would have elected to undergo, surgical excision of the tumour. This would have been curative and the deceased would not have progressed to metastasis and death when he did.
 - (4) In the alternative, were surgical resection either not offered or not, the deceased would have been offered and would have elected to undergo treatment by radical radiotherapy. Again, such treatment would have been curative and the deceased would not have progressed to metastasis and death when he did.”
61. Ms Johnson submits that paragraph 29 of the Particulars of Claim pleads a purely factual case, in that, if a biopsy had been undertaken, then, a treatment path leading to surgery or radiotherapy would have been followed in the earlier part of 2010. As set out above, the claimant’s pleaded case is that if Mr Metcalf had undergone a biopsy in January 2010, and repeat scanning by the latest, March 2010, he would have been offered and elected to have undergone surgery for the removal of the tumour, which would have been curative. If surgery had not been offered or not chosen, Mr Metcalf would have been offered, and elected to have undergone treatment by radical radiotherapy, which would also have been curative. Further, Ms Johnson submits that the claimant has also advanced a new case at trial based upon the treatment being delayed in 2010 until his MIA was under better control.
62. Ms Johnson relied upon *Credit Suisse AG v Arabian Aircraft & Equipment Leasing Co* [2013] EWCA Civ 1169 in respect of the approach the Court should take in these circumstances:

"Particulars of claim are intended to define the claim being made. They are a formal document prepared for the purposes of legal proceedings and can be expected to identify with care and precision the case the claimant is putting forward. They must set out the essential allegations of fact on which the claimant relies and which he will seek to prove at trial, but they should also state the nature of the case that is to be made in order to inform the defendant and the court of the basis on which it is said that the facts give rise to a right to the remedy being claimed." (per Moore-Bick LJ at para 17)

"The particulars of claim do not contain a claim based on clause 18.4 and it was therefore necessary for the Bank to seek permission to amend if it wished to include one. In the absence of such an amendment the judge should not have allowed it to pursue a claim under clause 18.4, regardless of the dispute relating to Fair Market Value." (per Moore-Bick LJ at para 18)

"I agree that the appeal should be allowed for the reasons given by Moore-Bick LJ. Since the Bank had formulated its pleaded case entirely without reference to clause 18.4, and did not seek to rely on that clause until Counsel's skeleton argument was served just before the hearing of the summary judgment application, it should not have been allowed to rely on that clause without amending its Particulars of Claim. It could have retained its pleaded reliance on clause 18.3, in the alternative, but it could not base its summary judgment application on clause 18.4 without putting its pleading in order." (per Lloyd LJ at para 22)"

63. No application was made by Mr Mumford to amend the pleadings to reflect what he had set out in his written opening, namely that Mr Froeschle and Dr Toy "would" or "should" respectively, if necessary, have discussed with Mr Metcalf a segmentectomy or radical radiotherapy. Mr Mumford submitted that the issue of "should" was covered in the existing Particulars of Claim. I consider that on a strict application of pleading rules, it would have been prudent to have ensured, by amendment before trial, that both "would" and "should" had been pleaded properly in the paragraph 29 of the Particulars of Claim and, certainly, at trial when the *Montgomery* issue became clearer. In my view, it is, however, open to me not to restrict the meaning of "would" to exclude "should", particularly where the trial has been conducted on the basis of the treatment the clinicians "would" and "should" have given to Mr Metcalf.
64. In my view, it is of significance that this issue was not raised by Ms Johnson until her final submissions and that no objection was raised during the course of the trial as to how Mr Mumford had put the case in opening or how he conducted his cross-examination. Moreover, I do not accept Ms Johnson's final submissions that, if the *Montgomery* issue had been pleaded, the instructions to the experts and the contents of the joint statement would have more substantially reflected that issue. I note that in the joint statement of Mr Lau and Mr Steyn one of the questions is: "what was surgical practice at the relevant time (in 2009/2010) about information that should be reasonably be provided to patients about reasonable alternative or variant treatment options?", and another which begins "what reasonable alternative or variant treatment options existed for a patient such as TM in 2010 (specifically, did those options include surgical resection with curative intent)? Similar questions, in respect of radical radiotherapy were asked of Dr Plowman and Dr Falk, as well as Dr Steele and Dr Falk. It seems to me that the issue of "should", as well as "would" was clearly in issue before the experts when they prepared their joint statements. I do not consider that Ms Johnson has been prejudiced in how she has conducted the trial. I also do not accept that there is anything in her submission that Mr Mumford has raised a new case shifting the treatment to later in the first half of 2010. It is all encompassed in the facts with which the experts have been concerned.

65. The issue which engages the principles in *Montgomery* is whether Mr Metcalf should have been given a full range of treatment options following the MDT, including surgery and radical radiotherapy with curative intent. As set out above, Mr Lau and Mr Steyn are agreed that, in 2009 and 2010, a patient would not have been given options for treatment which were not supported by the MDT, however, they are also agreed that by 2011, the ERS guidance had become more patient-centred and that such a conversation would have taken place.
66. In *Montgomery* Lord Kerr and Lord Reed said at paragraph 87:
- “An adult person of sound mind is entitled to decide which, if any, of the available treatments to undergo, and her consent must be obtained before treatment interfering with her bodily integrity is undertaken. The doctor is therefore under a duty to take reasonable care to ensure that the patient is aware of any material risks involved in any recommended treatment, and of any reasonable alternative or variant treatment. The test of materiality is whether, in the circumstances of the particular case, a reasonable person in the patient’s position would be likely to attach significance to the risk, or the doctor is or should reasonably be aware that the particular patient would be likely to attach significance to it.”
67. The matter was also considered in the case of *Hii Chii Kok v Ooi Peng Jin London Lucien* [2017] SGCA 38, in the Singapore Court of Appeal, where Sundaresh Menon CJ said at paragraph 142:
- “In terms of the proposed treatment, it has been held in Canada, and we agree, that while a discussion of benefits to be obtained and likely side-effects or risks from the recommended treatment or operation is obviously important, the advantages and disadvantages associated with alternative procedures and the consequences of foregoing treatment should also be disclosed since a patient cannot measure risks in the abstract. After all, without knowing at least in the broad terms what the alternatives to a recommended treatment are, and what the risks carry, it is difficult to see how a patient could make a sensible assessment of whether the recommended treatment is a suitable one. However, only reasonable alternatives need to be disclosed; the doctor should not have to provide information on fringe alternatives or so-called alternative practices (see *Malinowski v Schneider* [2010] ABQB 734 at [40] citing the Alberta Court of Appeal in *Seney v Crooks* [1998] ABCA 316 at [57]-[58]; nor should he have to provide information on mainstream treatment options which are obviously inappropriate to the facts. The option of non-treatment should also be communicated if it is an alternative that the reasonable patient, situated as the patient in question was, would regard as material (*Malinowski v Schneider* at [41])”
68. The question is what treatment options Mr Froeschle and Dr Toy should have explained to Mr Metcalf. This is not an issue that can be resolved solely by expert evidence. If it was, then, the oral evidence of the claimant’s experts, Mr Lau and Dr Plowman, would be conclusive that, in their view, the treating clinicians would not have been negligent in failing to give Mr Metcalf the opportunity of surgery or radical radiotherapy.
69. Dr Falk gave the example of a patient whose cancer had metastasised throughout his body as being one to which a treatment, where it might not be reasonable to offer surgery. That is not, however, the position in this case, where Mr Metcalf did come

within the criteria in the ERS guidelines for surgery, and in circumstances where I accept Dr Plowman's evidence that conventional radiotherapy could have been undertaken. It seems to me that in those circumstances, in 2009, or the first half of 2010, Mr Froeschle and Dr Toy, respectively, should have discussed with Mr Metcalf the options of surgery and radiotherapy, explaining the risks and benefits, in his particular situation, bearing in mind his age, his comorbidities, and his treatment for MAI. It does not seem to me that Mr Metcalf would have been able to make a sensible assessment of whether to wait and see, which would have come from Dr Toy, without having weighed up the risks of surgery and radical radiotherapy. I am, however, also satisfied that Mr Froeschle and Dr Toy were entitled in 2010 to warn him about the substantial risks of either option, for the reasons set out above.

70. The hurdle that Mr Mumford must then surmount is whether Mr Metcalf would have accepted the treatment, either surgery or radical radiotherapy with curative intent, if either had been offered to him. There is an absence of evidence on this issue except for the short reference at the end of Mrs Metcalf's witness statement, set out above, which was not subject to cross-examination by Ms Johnson. I do not consider that the fact that Ms Johnson did not cross-examine on a very short passage in Mrs Metcalf's witness statement, led to a material disadvantage to either party.
71. Mr Mumford relies upon the fact that Mr Metcalf was an active 78 year old with a wide range of activities and pastimes. He also relies upon the fact that Mr Metcalf was willing to undergo a biopsy, as noted by Dr Sheldon, and he underwent minor operations subsequently for a cataract and bursitis. Having considered this issue carefully, in circumstances where Mr Froeschle or Dr Toy, if they had seen him, would have explained the risk to his health of undergoing either surgery or radiotherapy, and that there was risk to his continuing lung function, which could be fatal, in my view Mr Metcalf would have heeded their warnings, from Mr Froeschle about the risks of undergoing surgery, and when he had been referred to Dr Toy, about the risks of undergoing radical radiotherapy. The potential for damage to Mr Metcalf's existing lung function was substantial. In my view, it is more likely than not that Mr Metcalf would have accepted the option of wait and see how the small tumour in the left lobe of his left lung developed, and when it became symptomatic, for it to be treated with palliative radiotherapy.
72. Although Mrs Metcalf states that her husband was not averse to surgery and would have fought to live, I do not find her statement compelling evidence leading me to a different conclusion. In my view, the probability is that Mr Metcalf, at his age, would have settled for living with an initially asymptomatic small tumour rather than run the risks of surgery or radical radiotherapy. In fact, as Mr Steyn pointed out, he lived for another three to four years without signs or symptoms of the tumour without any treatment. The symptoms from which he did suffer were from his other co-morbidities, particularly COPD.
73. It follows that, for the reasons set out above, I dismiss the claim.