IN THE SUPREME COURT OF JUDICATURE OF JAMAICA

CIVIL DIVISION

CLAIM NO. 2002/M273

BETWEEN	MARGARETTE MAY MACAULAY (administratrix of the estate Berthan Macaulay; deceased)	CLAIMANT
AND	ATTORNEY GENERAL	1ST DEFENDANT
AND	THE SOUTH EAST REGIONAL HEALTH AUTHORITY	2ND DEFENDANT

Dr. Randolph Williams and Ms. Aisha Mulendwe for the Claimant

Mrs. Michelle Shand-Forbes and Ms. Alicia White for the Defendants

Medical Negligence – Breach of Duty – Causation

Heard: June 1, 2, 3, October 1 and December 9, 2011

Straw J.

1. The claimant, Mrs. Margarette Macaulay is the administratrix of the estate of Mr. Berthan Macaulay. Prior to his death, Mr. Macaulay, in July 1999, was treated for a cancerous tumour on the right side of his tongue extending into the right mandible by Dr. Venslow Greaves, a consultant oncologist and a specialist in radiation oncology at the Kingston Public Hospital (KPH).

2. The 1st defendant is the representative of the 2nd defendant by virtue of the Crown Proceedings Act and the 2nd defendant is vested with the authority and the

power to manage, control and administer KPH and to employ and engage medical specialists, practitioners, nurses, staff and provide other services at the said hospital.

3. Mr. Macaulay was admitted to a course of radiation treatment at KPH at the direction and under the supervision of the said Dr. Greaves, a servant and/or agent of KPH between August and September 1999.

4. During the course of the radiation treatment, one of the radiation therapists employed to KPH, omitted on one occasion, to insert a 'bite block' in Mr. Macaulay's mouth before commencing radiation treatment. It is alleged by the claimant that this took place towards the end of the course of treatment, in the middle to the end of September 1999.

5. The claimant avers that as a consequence of the omission, Mr. Macaulay suffered grave injury to his tongue and mouth, pain and an inability to eat or drink, thereby causing dehydration and malnutrition and caused him to suffer loss and great expense.

6. The Particulars of Injuries contained in paragraph 8 of the Further Amended Particulars of Claim includes the following:

a. considerable difficulty swallowing;
b. inability to eat and swallow solids and liquids;
c. speech impairment resulting in inability to perform legal practice;
d. dehydration and malnutrition;
e. excessive weight loss;
f. excruciating pain;
g. physical, mental distress and depression;
h. ---
i. ---
j. radiation of the entire mouth including tongue, lips, gum and teeth.

7. The defendants admit that the bite block was omitted to one side of his mouth on one occasion, but they contend that the injuries to Mr. Macaulay were not caused by this omission. These injuries were due to the effects of the radiation itself which were exacerbated by Mr. Macaulay's failure to quit drinking and smoking during and beyond the course of treatment.

8. The issue to be determined is whether the omission of the bite block was the proximate cause of Mr. Berthan Macaulay's suffering as outlined in the Particulars of Claim. The defendants have put the evidence of Dr. Charles Lyn, Dr. Venslow Greaves and the expert witness, Dr. Dingle Spence before the court for its consideration. The claimant relies solely on the evidence of Mrs. Macaulay.

Evidence in Relation to the Consultation and Pre-radiation Treatment

9. Dr. Venslow Greaves has testified that Mr. Macaulay was referred to him by Dr. Charles Lyn, an ENT surgeon, with a cancerous tumour on the right side of his tongue extending into the right mandible in July 1999. He further stated that he explained what radiation treatment involved and outlined the side effects to both Mr. Macaulay and his wife, Mrs. Macaulay. These side effects included:

- soreness in the mouth, tongue and pharynx (throat)
- hyperpigmentation
- soreness of the mouth together with other discomforts would be likely to affect how much he would be able to eat and drink orally.

Dr. Greaves also stated that he explained to Mr. McCaulay the necessity to drink lots of fluid during treatment.

Admissions by Mr. Macaulay

10. Dr. Greaves stated that Mr. Macaulay told him that he drank alcohol instead of water and had not drunk water in years. He also stated that he was anorexic and smoked twelve cigarettes daily. As a result of these admissions, Dr. Greaves stated that he told him to discontinue drinking and smoking as both tended to aggravate and worsen the acute side effects of radiation, such as mucositis, during the course of treatment to the oral cavity. Dr. Greaves also stated that it was standard to tell a patient receiving radiation for the head and neck to stop drinking and smoking as it increases the side effects. He admitted, however, that the warning was not recorded in his notes.

11. Mucositis is the medical term for the inflammatory reaction of the lining of the oral cavity. It is characterized by redness, discolouration and exudate (a coat of inflammation on the tongue).

12. Mrs. Macaulay has taken issue with this evidence to some extent. She stated that Dr. Greaves advised Mr. Macaulay to reduce his drinking and smoking so that the cancer would not re-occur and that he also told him of some of the side effects of radiation which were to last two to three weeks. These included difficulties eating solids.

13. Mrs. Macaulay admitted however, in her witness statement, that Dr. Greaves told her husband to desist from drinking and smoking. She maintained that this was only in relation to the re-occurrence of the cancer. She also stated that, although he would boast that he did not drink water, he did drink a little.

The Radiation Treatment

14. Dr. Greaves described the radiation treatment planned for Mr. Macaulay in relation to the area to be treated. It is as follows:

1. A treatment field is designed. This is an area marked out to surround the tumour, based on its size. This field is described in terms of length and width.

2. Areas outside the radiation treatment field are protected by shielding blocks. These shielding blocks are placed in the radiation field on the Gantry Head of the Cobalt 60 machine. The Gantry Head is where the radiation beam originates.

3. The radiation dose prescribed was 66 gray tumour dose in 33 fractions over six-and-a-half weeks. (This involved 200 gray dose per day, distributed 100 to right side, 100 to left side).
Two radiation beams would irradiate the tumour lying on the tongue and mandible. These two beams would ensure a high dose to the area where the tumour was located.

Dr. Greaves stated that the actual dose was administered over a period of seven weeks due to the fact that Mr. Macaulay missed a few days as a result of the intensity of the radiation reaction on the tongue.

The Bite Block

15. The procedure involved a bite block being placed in Mr. Macaulay's mouth, first on one side, then another, as each side of his mouth received irradiation in turn. Dr. Greaves stated that the bite block was an essential part of his instructions. It is noted that the words 'special mouth bite' are part of the instructions written on Mr. Macaulay's treatment plan.

16. It is this bite block that is the centre of controversy in relation to the treatment offered to Mr. Macaulay. It is not disputed that the bite block was omitted for one daily treatment to one side of Mr. Macaulay's mouth. Mrs. Macaulay states that this

occurred on a date in the second half of the treatment period, sometime after mid-September 1999.

17. Although the claimant's evidence is that it was left out by one Ms. Williams, the identification of the actual radiation therapist is disputed by the defendants. The omission was not recorded in the records. According to Mrs. Macaulay, it was omitted for the treatment to the right side of the patient's mouth and when the therapist returned to prepare him for the treatment to the left side, Mr. Macaulay complained that his mouth was 'hot and hurting.' The evidence of Mrs. Macaulay is to the effect that Mr. Macaulay stated, '"Why did you not put that thing in?" Ms. Williams expressed regret that she had forgotten, placed it in and then did the left side of his face.'

18. It is Mrs. Macaulay's opinion that her husband suffered far more than the side effects that were explained to them. She has stated that he never ate solids again to the day of this death and that he had lost all his teeth so that he could not chew.

Evidence of Mrs. Macaulay of the effects on Mr. Macaulay after the bite block omission

19. Mrs. Macaulay stated that Mr. Macaulay did not remain in his office that day as he was in pain. By 9:30 p.m., he was in excruciating pain and his tongue, his palate, his jaws, inner cheeks, gums and insides of his lips were seeping blood and looked like liver.

20. According to her, Dr. Greaves was still on leave, so she spoke to his *locum* the next day, who prescribed a mouth ointment, spray and some pain killers. The claimant's attorney, Ms. A. Mulendwe, actually suggested to the defence witness, Mr. Betageri, one of the radiation therapists, that he was in fact this person. However, this

was denied by the witness who stated that he was not a doctor and could not write a prescription.

21. Mrs. Macaulay further stated that Mr. Macaulay had no radiation treatment the next day and for the next two or three days. In support of this, the schedule of Mr. Macaulay's treatment was put into evidence. The document reflects 33 treatments between the August 5, 1999 to September 22, 1999.

22. She has stated that her husband saw Dr. Greaves, the Monday after 'the burning of his mouth' and that Dr. Greaves stated that the incident was unfortunate but persuaded Mr. Macaulay to continue the treatment in order that the cancer would be fully radiated. In a subsequent visit to Dr. Greaves, Mr. Macaulay was dehydrated and weak so Dr. Greaves inserted a nasal tube in order to facilitate liquid nourishment. She indicated that he was in constant pain, on high doses of pain killers and on September 26, 1999, he was admitted to the University Hospital by a Dr. Owen Morgan. He was released on October 1, 1999.

23. She further stated that he had to receive treatment from dentists and a dental specialist and that he had lost his ability to taste anything and needed artificial saliva as he was unable to produce saliva.

It is important to note that she has admitted that he had continued smoking and only stopped smoking and drinking after the incident (the omission of the bite block) as he could not taste anything. However, she said that his drinking at that time had been limited to wine, beer and guinness.

24. Mrs. Macaulay also stated that in August 2001, stomach tubes were inserted in order to provide sufficient nourishment to Mr. Macaulay. However, between 1999 to

2000, he was fed through the nasal tube. In 2004, the tubes were removed and he started trying to eat pureed food.

Evidence of the Defendants in relation to the bite block omission and treatment of Mr. Macaulay

25. Mr. Betageri stated that Mr. Macaulay was concerned that the bite block had been omitted on one side of his mouth when his treatment was started the day before. He said that he wanted to see Professor Greaves as he thought that he had a sore tongue because of the incident. The witness states that as a result of Mr. Macaulay's request, he gave him the docket to go upstairs to see Dr. Greaves.

26. The evidence of Dr. Greaves is that Mr. Macaulay reported after 12 daily treatments that his tongue was sore and that he could put nothing on it. He was treated with oral lining pain killer and analgesic tablets. He further stated that on the following day, there was only minimal improvement and intravenous fluids were administered. He was noted as having oral candidiasis and was treated with a fungal suspension and analgesic tablets.

An examination of his medical records places twelve (12) daily treatments as of the date of August 24, 1999.

Dr. Greaves states that after fifteen (15) fractions, a lip block was inserted in the radiation field to shield the lips. Again, based on the documentary evidence, this would have occurred on or about August 28, 1999.

27. Dr. Greaves stated that he again reviewed Mr. Macaulay after thirty (30) daily treatments were administered.

The court notes that this would be on September 17, 1999, around the time that the claimant has stated that the incident took place. Dr. Greaves found that Mr.

Macaulay was not getting much nourishment and was mildly dehydrated. He recommended a naso-gastric tube. It is his evidence that the oral nutritional intake was much reduced because of the radiation treatment in the oral cavity.

He also stated that Mr. Macaulay insisted on completing the final three treatments even though he offered to suspend it for a few days. Dr. Greaves denied that he convinced Mr. Macaulay to continue the treatment at that time. He agreed that it was possible that it was on September 20, 1999 that Mr. Macaulay told him of the missing bite block.

28. Dr. Greaves saw Mr. Macaulay again on October 14, 1999. He reported that his tongue was still sore and that he was taking nutritional supplement by mouth. He last saw Mr. Macaulay on February 2, 2000. At that time, he complained of not being able to swallow properly and of having a painful tongue.

Dr. Greaves noted that the tongue appeared slightly red in appearance but otherwise normal.

29. The evidence of Dr. Lyn, the referring doctor, essentially supported Dr. Greaves' findings.

Dr. Lyn stated that after he referred Mr. Macaulay to Dr. Greaves, he returned to see him on September 9, 1999. At that time, he complained of swelling of the tongue and reported that for about three weeks, he was unable to eat solids. Dr. Lyn stated that he diagnosed him with fungal stomatitis (mucositis) in addition to the normal stomatitis which he would have expected with radiotherapy.

Dr. Lyn confirmed that this was an inflammation of the lining of the mouth and part of the normal complication of radiotherapy.

Based on the evidence of both Dr. Greaves and Dr. Lyn, if accepted by this court, the side effects of the radiation treatment would have preceded the date of the bite block omission.

30. Dr. Lyn stated that he saw Mr. Macaulay on October 4, 1999, and that Mr. Macaulay reported that he was feeling much better and the mouth was healing. He was seen again on October 8, 1999. Dr. Lyn stated that the healing was progressing and that he gave him dental crème to apply to his mouth. He reviewed him on November 19, 1999 and Mr. Macaulay stated that the pain in his mouth was not bad. He, however, still had the same fungal/yeast infection.

31. It is Dr. Lyn's evidence that on his review of Mr. Macaulay on December 15, 1999, he was healing slowly but there was no evidence of any tumour. On May 25, 2000, Mr. Macaulay told him that he was not eating any solids and had lost a lot of weight. At that time, Dr. Lyn noted that he had some induration around the right mandible on the floor of the mouth. There was no tumour, just swelling, which he indicated was not incompatible with post radiation treatment. Dr. Lyn last saw him on June 2, 2000 and gave him some gel to apply to the area. He stated he was not aware of Mr. Macaulay having in feeding tubes.

The Purpose of the Bite Block

32. Dr. Greaves has stated that the bite block was not a protective guard and that it had two functions. He stated as follows:

- *"It fixes the tongue in the mouth and depresses it away from the top or roof of the oral cavity or palate, to reduce the radiation dose to this area."*

He further stated that the bite block would ensure that the tongue remained within the radiation field so that the tumour on the tongue would be irradiated and that it was never the intention to use the bite block to shield any area of the tongue from radiation. He explained that the tongue was part of the area involved with cancer so this area could not be shielded from the radiation dose.

33. By way of further explanation, Dr. Greaves stated that the tongue is a mobile structure and the plan was that it be fixed in position and away from the top of the mouth or palate as 'one would not want to treat the tongue and it misses the treatment because it is moving all over the place.'

34. He agreed, however, that if the bite block was not inserted on a particular treatment, that would not be in keeping with his plan. He stated as follows:

> *"The tongue instead of being in position would have risen to the top of the mouth and the top of the mouth would have received a higher dose than intended. This would include the teeth in upper jaw with the exception of the canine teeth for the day. But the tongue would still have received, molars and premolars would have received a higher dose, wisdom tooth, a slightly higher dose. Bones in the palate would have received a higher dose for that day. The treatment was directed to the entire tongue."*

35. Dr. Greaves was asked whether he agreed that in the early stages of treatment, the bite block minimises xerostomia (dry mouth) and mucositis, improves comfort and aids feeding. He stated that it allowed a smaller area to be radiated so it would improve comfort and aid feeding.

36. He was also asked if later benefits included reducing both radiation cares and the risk of osteoradionecrosis which would result in an improvement of the quality of life. Osteoradionecrosis is the death of the bone tissue/cells that can occur as a result of radiation and which may result in dental decay and loss of teeth.

Dr. Greaves answered as follows:

> *"--- I would agree to some extent but it has to be within context depending on whether one is referring to osteoradionecrosis in the mandible or maxillary antrium. It would reduce it in relation to the maxillary antrium because you are pulling away from that. It would not reduce the dose going to the mandible."*

Cumulative Effects of the Doses

37. It is the evidence of Dr. Greaves that each tissue has a tolerance level that it remembers and if one exceeds the dose, the tissue is destroyed. He explained that in general, tumours have lower tolerance doses than normal tissues.

He further explained that a distinction is to be made between early and late stages as it is the cumulative dose that is important. He agreed that for one treatment, Mr. Macaulay would have received a higher dose to the upper palate. However, the culmulative effect would have been to the mandible, not the palate and that the bite block would have removed the tongue from the palate so the palate would have had little radiation compared to the target area.

Expected side effects of Radiation

38. Dr. Greaves stated he would expect the side effects to be:

- difficulty in swallowing and eating;
- speech impairment;
- inflammation of tongue and mandible;

- weight loss associated with eating difficulties.

He stated that on an average, the side effects would last two-to-three weeks after treatment is completed. It is within this context that Mrs. Macaulay is questioning the severity of the side effects on Mr. Macaulay and contends that it was the omission of the bite block that is the proximate cause.

Evidence in relation to Macaulay's continued smoking and drinking

39. The defendants are contending that Mr. Macaulay continued to smoke and drink during and after the radiation treatment and it is this behaviour that exacerbated the mucositis reaction to the said treatment.

40. Dr. Lyn stated that Mr. Macaulay told him that he drank and smoked everyday during the treatment period. He further stated that he had this conversation with Mr. Macaulay when he had the stomatitis and he told him how it affected it (stomatitis) and also the re-occurrence of the cancer.

Mrs. Macaulay has denied that Dr. Lyn even spoke to Mr. Macaulay about the effect in relation to the radiation treatment.

She said that Dr. Lyn counselled him to persist in his attempts to cut down on his smoking and also that Dr. Lyn advised him to try and stop both smoking and drinking specifically wine, beer and 'guinness' and that he told Mr. Macaulay that the cancer could have started because of drinking and smoking. However, she denied that Mr. Macaulay told Dr. Lyn that he drank and smoke everyday during treatment.

Dr. Lyn gave evidence that Mrs. Macaulay was not present at all the visits.

41. It is clear, however, that Mr. Macaulay did continue smoking and drinking up to some point in his treatment. It is the evidence of Mrs. Macaulay that he continued smoking and stopped smoking and drinking after the incident as he could not taste anything. She also explained that his drink was limited to wine, beer and 'guinness.'

42. It is to be noted also that Mr. Betageri's evidence is that, on about three to five occasions when he treated Mr. Macaulay, he would smell alcohol and cigarettes while he was talking to him. Mrs. Macaulay also stated that Mr. Macaulay visited a doctor in London in May 2000 where he was advised to reduce smoking and drinking. This would have been after the radiation treatment had been completed. He was engaged in these activities before and after treatment.

43. Dr. Greaves stated that Mr. Macaulay continued his intake of alcohol during the treatment and that Mr. Macaulay told him he could not drink water, that he would drink beer instead. Dr. Greaves stated that he continued to advise him against this. Although he had been warned by both doctors that this activity could cause the reoccurrence of the cancer, he continued. There is cogent and compelling evidence, which I have accepted, that he continued drinking and smoking up until mid to late September, that is, during the period of treatment.

The effect of the drinking and smoking during radiation treatment

44. It is the opinion of Dr. Greaves that Mr. Macaulay's continuous intake of alcohol in addition to smoking and poor nutritional intake combined to increase the severity of his oral radiation induced mucositis

It is also his opinion that Mr. Macaulay's dehydration was a result of radiation induced oral mucositis or soreness aggravated by alcohol which would have made eating and drinking uncomfortable.

45. In relation to the severity of the reaction, he stated as follows:

> *"Mr. Macaulay's radiation reaction was more severe than normal. Radiation reaction in the mouth ----- tends to resolve in about three weeks. My opinion is that the continued alcohol intake, cigarette smoking and poor nutritional intake contributed to the delayed healing of the oral tissue which had developed radiation induced mucositis."*

Assessment of the evidence

46. It is clear, and I accept, that Mr. Macaulay began to experience radiation reaction in his oral cavity prior to the date of the omission of the bite block.

I accept also that he expressed concern about the missing bite block but he did complete the full treatment.

I accept that he continued to drink and smoke, at least, for a period of time during the treatment.

I accept that he was told of the side effects of this activity by both Dr. Lyn and Dr. Greaves.

47. Dr. Lyn treated him for mucositis during the radiation treatment and would have had the opportunity to speak to Mr. Macaulay on the issue. The claimant has sought to impugn Dr. Lyn's credibility because he refused to write a report when requested by the claimant's attorney. I accept his explanation for this and assess him as a reliable and credible witness. He stated as follows in relation to his refusal:

> *"--- the emphasis seemed to have been the complication of the radiotherapy and injuries he may have received. I informed her it was beyond my competence and could not give an opinion --- my candid opinion would not be beneficial to your patient's case as what I saw was normal side effects of radiation."*

48. I also accept that Dr. Greaves spoke to Mr. Macaulay in relation to the side effects and the activities of smoking and drinking. He is a consultant oncologist and heads a medical team responsible for the management of patients suffering from cancer using ionizing radiation and chemotherapy. I find him also to be a very credible witness.

49. The major issue for determination, however, is whether the claimant has proved on a balance of probabilities that the defendants breached the duty of care owed to Mr. Macaulay by the omission of the bite block. Secondly, if there was such a breach, whether the omission of the bite block for one treatment on one day was the proximate cause of the severe reaction or aggravated features .of mucositis suffered by Mr. Macaulay.

The Law

50. In order to succeed in this claim for negligence, the claimant must prove the following:

- That that the second defendant owed Mr. Macaulay a duty of care.
- The second defendant breached that duty of care by failing to meet a standard of care required by law.
- The second defendant's breach of duty caused him to suffer injury or harm as pleaded.

51. The claimant has no difficulty in relation to the first limb. Both the Kingston Public Hospital and its medical staff owed a duty of care to Mr. Macaulay (see "**The Law of Torts**," (4th edition) J G Fleming, pages 318 – 319) **Millen v University Hospital of the West Indies Board of Management** (1986) 44 WIR pg 275, per Carberry JA, pg 285 j to 286 a-e).

52. In relation to the standard of care, the classic definition is to be found in **Bolam v Friern Hospital Management Committee** (1957, 2 All ER 118, per McNair J at pg 121e):

> *"The test is the standard of the ordinary skilled man exercising and professing to have that special skill. A man need not possess the highest expert skill at the risk of being found negligent. It is well-established law that it is sufficient if he exercises the ordinary skill of an ordinary competent man exercising that particular art ---. Counsel for the plaintiff put it in this way, that in the case of a medical man, negligence means failure to act in accordance with the standards of reasonably competent medical men at the time. That is a perfectly accurate statement, as long as it is remembered that there may be one or more perfectly proper standards; and if a medical man conforms with one of these proper standards, then he is not negligent."*

I have concluded that there was a breach of duty and I am fortified in my view based on the evidence of Dr. Dingle Spence, a consultant radiation oncologist and expert witness called by the defendants.

53. In her expert report, she outlines the standard of care required to treat a carcinoma of the tongue extending to the mandibular region of the mouth. In relation to the radiotherapy treatment, she states as follows:

> *"The plan is made with a view to creating a treatment volume that would include the local extent of the tumour and the appropriate lymph node drainage areas. The radiation oncologist would also ensure that there is appropriate shielding to the lips and hard plate at the time of planning. Checks are also made to ensure that the spinal cord is not included in the high dose volume to be treated. The head should be immobilized according to the equipment available in the local setting and the treatment should be planned with a bite block in situ. A bite block serves to immobilize the tongue during treatment and to shield the hard palate from the high dose volume of the radiation…*
> *Once the treatment starts, it is the therapeutic radiographers who set the patient up on the treatment machine each day. The patient should be set up in exactly the same way (as prescribed by the radiation oncologist) at each treatment."*

Dr. Spence also explained that the bite block is not a shield but it keeps the palate away from a high dose area and that it was possible that Mr. Macaulay's palate might have been exposed to a higher dose than otherwise in absence of the bite block.

54. She agreed that using a bite block allows for a reduction in irradiation of the normal tissue and that in the early stages (of treatment), it minimizes xerostomia and mucositis, improves comfort and aids feeding. She also agreed that later benefits reduced both radiation cares and the risk of osteoradionecrosis, thereby maintaining quality of life.

55. In relation to osteoradionecrosis, Dr. Spence stated as follows:

> *"Osteoradionecrosis of the jaw can be a side effect of radiation and results in a breakdown of the bone of the jaw and that may cause a draining sinus. It is often*

> *related to poor dentition and may result in pain, a draining sinus and poor healing. It could result in the rotting of teeth. Radiation cares is related to the fact that a person develops a dry mouth. The saliva is anti bacterial. If there is a permanent dry mouth, saliva production is more or less absent and the tooth is likely to decay. You can have radiation cares away and apart from radiation induced osteoradionecrosis of the jaw."*

56. Counsel for defendants submitted that the real question is whether the duty of care in administering treatment to the claimant's mouth fell below a standard of practice considered to be proper by a responsible body of oncologists. However, all the evidence points to the importance of the bite block in the overall plan for the treatment of Mr. Macaulay.

It is my opinion that the radiation therapist breached the duty of care owed to Mr. Macaulay by the omission of the bite block albeit, on a single occasion. In coming to this conclusion, I bear in mind also the evidence of the cumulative effect of radiation on the oral tissue.

Was the breach of duty the proximate cause of injury?

57. In **Lanphier and Wife v Phipps** (1835-42) AER pg 421 at 422, Tindal CJ posed the question (in relation to the above issue) to the jury in the following words:

> *"What you will have to say is whether you are satisfied that the injury sustained is attributable to the want of a reasonable and proper degree of care and skill in the defendants' treatment."*

Evidence of Dr. Spence in relation to the side effects of radiation treatment

58. It is the opinion of Dr. Spence that the list of injuries suffered by Mr. Macaulay are well recognised side effects suffered by many patients undergoing radiation therapy to the head and neck area.

She has also stated that the magnitude of these symptoms varies considerably from patient to patient.

59. In assessing the treatment of Mr. Macaulay, she made the following observation:

> *"Mr. Macaulay started radiation therapy on August 5, 1999. The first documented review of the patient was on August 23, 1999, about one-third of the way through the prescribed treatment. This is the time that a majority of patients begin to develop painful mucositis … As the treatment progressed, the patient's mucosal reaction persisted and worsened and eventually necessitated feeding through a naso-gastric tube…."*

60. Dr. Spence agreed with the evidence of Dr. Greaves and Dr. Lyn that continued use of alcohol and cigarettes during radiation treatment serves to worsen any mucosal reaction that the patient might sustain during the treatment. Her evidence is as follows:

> *"Mr. Macaulay's mouth and tongue continued to be dry and sore for many months and even up to one year following the completion of treatment. Use of alcohol – would have continued to contribute to an inflamed atrophic oral mucosa. It is my opinion that Mr. Macaulay falls into a well recognised and documented group of individuals who unfortunately, suffer*

> *extreme reactions to radiation therapy both in the treatment phase, and then on into the longer term i.e., "late radiation therapy effects." His case was not helped by his continued use of alcohol and tobacco during treatment and afterwards."*

61. I have already found that there is cogent and compelling evidence that Mr. Macaulay continued to imbibe alcohol and to smoke during treatment and afterwards. The claimant has put forward no evidence that contradicts the opinion of Dr. Spence, Dr. Greaves and even Dr. Lyn, in relation to aggravated side effects caused by the above activities.

62. Having accepted that continued smoking and drinking would aggravate the side effects, I will have to determine a secondary issue. Is there any evidence that could lead the court to draw the inference that the injuries suffered by Mr. Macaulay went beyond known side effects, whether early or late effects, that can be attributed to the omission of the bite block?

63. Dr. Spence stated that it is her expert opinion that the omission of the bite block on a single occasion would not, by any stretch of clinical evidence, have led to the injuries attributed to this event:

> *"The treatment administered to Mr. Macaulay met the requisite standard of care for his condition. Omission of insertion of the bite block on one occasion was less than ideal, but it did not occur more than once and the event could not have contributed to the injuries as claimed."*

64. She did agree, however, with the evidence of Dr. Greaves that it is possible that the palate could have received a higher dose of radiation on this one occasion.

The claimant has put forward evidence that Mr. Macaulay lost all his teeth and it has been submitted that this could not be due to mere side effects.

In relation to this issue, some questions were posed to Dr. Spence and she was asked whether she agreed with statements written in an article in **'The British Journal of Oral and Maxillo Facial Surgery, 2001, vol 39."** The article concerns **"The Lester Radiotherapy Bite Block – an Aid to Head and Neck Radiotherapy**," by P. Hollows, J.B. Heyter and S. Uasanthan.

65. Dr. Spence agreed with certain statements made in the article that later benefits of the bite block include reducing both radiation cares and risk of osteoradionecrosis.

It is to be noted that there is no evidence in Dr. Greaves' records that Mr. Macaulay suffered from poor dentition. Dr. Spence stated that examination of the patient's teeth would be standard before radiation and that the results of such an examination ought to be recorded.

66. In relation to the effect of the bite block, Dr. Spence stated that it might have shielded the upper palate from the side effects of radiation and that the shielding might have prevented osteoradionecrosis of the jaw.

Her evidence on the point is included also within the following questions and answers:

"Question: *Would you say the severity of side effects would have been heightened because structures that ought not to be exposed to high radiation were exposed by the absence of the bite block on one occasion?*

Answer: *No --- the leaving out of the bite block on one side of the mouth for one day could not have contributed to the severity of the effects described ---. Radiation*

is delivered in small does every day so even if there was exposure on that day, it would be a higher dose of a small dose. Mr. Macaulay was given a total of 66 gray in 33 fractions over six weeks. The bite block was missing for one field, one gray dose on one day. The omission of the bite block for one out of 66 gray could not have caused the degree of the severity ---.
My opinion would not be different if the exclusion was at the penultimate treatment bearing in mind the cumulative effect. I agree that there is a cumulative effect on the tissues."

"Question: What then is the basis of your statement above?

Answer He had an extreme reaction which is seen in some people. The exclusion of the bite block for one field, one day would not have made a significant difference to the overall outcome of the treatment. If the bite block had been out for several days, there is a cumulative effect. But not for one gray dose on one day.
There are --- studies I read leading up to this trial that gives you reported incidents in relation to side effects of radiation. The point is, whilst there is no doubt that he received a higher portion of one gray dose --- it cannot be used as an explanation to understand the degree of severity ---. What I am saying is not probability. All these side effects are recognized and documented."

67. Dr. Spence was asked to explain Mr. Macaulay's complaint of reactions after the treatment with the missing bite block. She stated that there is a psychological aspect of knowing something was not there that should be there. She stated also that based on experience, it would be unlikely that he would feel different.

68. Counsel for the claimant submitted that Dr. Spence provided no factual basis for her opinion. However, this opinion is set within the context of evidence that

mucositis occurs in 80 to 90% of persons and also that Mr. Macaulay commenced experiencing side effects before the incident.

69. Having considered all the evidence, I am of the view that the claimant has failed in her duty to prove on a balance of probabilities that the omission of the bite block was the proximate cause or even contributed to the severity of Mr. Macaulay's side effects.

While the court has empathy for what Mr. Macaulay endured during the relevant period, the evidence points significantly to other factors.

Mala Fides of the Experts

70. There are two final issues for this court to consider. Counsel for the claimant has submitted firstly, that Dr. Spence's evidence is not consistent with the distinctions made by the authors in the journal in relation to the cumulative effects of radiation treatment. The article suggests that it is at the later stages of the therapy that the bite block serves to reduce the risk of the more serious problems.

71. In relation to the opinion of the authors, Dr. Spence basically agreed with them. However, she went on to indicate what her position was in relation to the facts before her. The court cannot accept the opinion of authors over and above the evidence of Dr. Spence to the extent that she qualified the statements quoted from the article.

72. In **Millen v University Hospital of the West Indies Board Management** (supra), Carberry JA made the following statement in relation to the point raised (at pg 285 para e):

> *"We do not try issues of negligence on opinions contained in passages taken from a*

> *text book, --- unless and until it has been put to and adopted by a live witness---. One reason for this of course is that each patient has his or her own idiosyncrasies and infinite variations of conditions and combinations of symptoms and causes. The opinion and advice of a textbook writer may be of assistance but can be of no substitute for the evidence of those who have had the opportunity of examining the actual patient and forming their opinions, and giving evidence thereon ---."*

73. Secondly, counsel has submitted that the credibility of Dr. Spence is in question as she is an employee of the 2nd defendant also and a colleague of Dr. Greaves.

However, I do not find any evidence of *mala fides* in Dr. Spence. I accept her as a credible and impartial witness despite the obvious connections. There is no evidence to suggest that her expert opinion was influenced by the exigencies of litigation. Even if I were to look askew at her evidence, the evidence of Dr. Lyn and Dr. Greaves remain basically unchallenged.

74. At the end of the day, the claimant must prove that the defendants were at fault and that the fault materially contributed to the claimant's injury (**Joyce v Merton, Sutton and Wandsworth Health Authority** 27 BMLR, 124, per Hobhouse LJ pg 155-156.

Judgment is therefore granted to the defendants.

Costs to the defendants to be agreed or taxed.