Ruby LAKE DOB: Code A Died: 21/08/98

SUMMARY OF CONCLUSIONS

Ruby Lake an 84-year-old lady with a number of chronic diseases, suffers a fall and a fractured neck of femur in August 1998. She is admitted to hospital and has operative treatment but develops post-operative complications including chest infection, chest pain and confusion at night and subsequently deteriorates and dies in the Gosport War Memorial Hospital.

In my view a major problem in assessing this case is the poor documentation in the Gosport Hospital in both the medical and nursing notes, making a retrospective assessment of her progress difficult. However, I believe the overall standard of medical care is the Gosport War Memorial Hospital to be negligent. The use of the drug chart was also significantly deficient.

1. INSTRUCTIONS

To examine the medical records and comment upon the standard of care afforded to the patient in the days leading up to her death against the acceptable standard of the day. Where appropriate, if the care is felt to be suboptimal, comment upon the extent to which it may or may not disclose criminally culpable actions on the part of individuals or groups.

2. ISSUES

- 2.1. Was the standard of care afforded to this patient in the days leading up to her death in keeping with the acceptable standard of the day.
- 2.2. If the care is found to be suboptimal what treatment should normally have been proffered in this case.
- **3. CHRONOLOGY/CASE ABSTRACT.** (The numbers in brackets refer to the page of evidence, the numbers with 'H' in front are the Haslar notes).
 - 3.1 Ruby Lake an 84-year-old lady in 1998, was admitted as an emergency on 5th August 1998 to the Haslar Hospital (H52).
 - 3.2 In 1982 she had been diagnosed with osteoarthritis (211). In 1989 she was noted to have varicose leg ulcers (73) and in 1990 was documented as having gross lipodermatus sclerosis (239). In 1993 she had problems with left ventricular failure, atrial fibrillation, aortic sclerosis and during that admission had a bout of acute renal failure

with her urea rising to 25.7 (60). Her Barthel was 18 in 1993 (179).

- In 1995 she was admitted with an acute arthritis and was noted to have a positive rheumatoid factor (30) and a positive ANF. She had mild chronic renal failure, which was noted to be worse when using non-steroidal anti-inflammatory drugs (31) her creatinine rose to 178 when Brufen was introduced (69). Her mental test score was 10/10 (70) but she did have some mobility problems and was seen by an Occupational Therapist and a Physiotherapist (93) (164).
- In 1997 she was under the care of the Dermatologist with considerable problems from her leg ulcers and she was now having pain at night and was using regular Co proxamol (239). In 1998 she was seen by a Rheumatologist who thought she had CREST syndrome including leg ulcers, calcinosis, telangiectasia, and osteoarthritis, (353).
- On 29th June 1998 she was admitted to the Gosport War Memorial Hospital under the care of her GP Dr North (300). The medical clerking is virtually non-existent (75), simply saying that she was admitted for her leg ulcer treatment and her pulse, blood pressure and temperature being recorded. It was noted that she was having continual pain and Tramadol 50 mgs at night was added to her regular 3 times a day Co proxamol. (197) She was seen by a Consultant Dermatologist during this admission (76).
- The nursing cardex showed that she was continent with no confusion (298) however; she was sleeping downstairs (299). Her Barthel was 12 (314) and her Waterlow pressure score was 16 (high risk). She appears to have been discharged home.
- 3.7 She was admitted to the Haslar Hospital on 5th August having fallen and sustained a fractured neck of femur. This is operated upon successfully. By the 8th she is noted to be short of breath and probably in left ventricular failure with fluid overload (H63). Her renal function has deteriorated from a urea of 16 and a creatinine of 119 on admission (H9) to a urea of 25 and a creatinine of 127 (H68) by the 10th. Certainly on the 10th she appear unwell (H17) and it was not clear if this was a possible myocardial infarction or a chest infection (H17). However a chest x-ray is thought to show a chest infection and she is treated with regular Augmentin, an antibiotic (H69). On 11th her white count is significantly raised at 18.8 (H96). She has a

mild anaemia post operatively of 10.5, (H92) her haemoglobin was normal on admission at 13.1 (H16).

- On 13th August she is found to be brighter and sitting out and walking short distances with frame (H18) and this functional improvement continues, documented in the notes up to 17th August (H18). However, she is noted to have had an episode of chest pain on 15th August (H75). Initial cardiac enzymes were normal (H103) on the 16th August and non-diagnostic on the 10th August (H109). But there is no doubt that her ECG changes between her admission ECG (H86) and the ECG(s) on 13th August and 15th August (H80 and H78). This is not commented on in the notes.
- The nursing cardex shows that she is unsettled most nights, for example, 10/8 (H166), 13/8 (H168), 16/8 (H170) and on the night before discharge from Haslar on 17th August she "settled late after frequent calling out". The nursing notes also show that she had a continuing niggling pyrexial and was still significantly pyrexial the day before discharge (H137). It also documents that on the day of transfer to the Gosport War Memorial Hospital, she has increased shortness of breath and oxygen is restarted (H171).
- 3.10 Her drug chart shows that she receives low molecular weight Heparin as a prophylaxis against deep venous thrombosis (Calciparine) from admission until discharge. Diamorphine 2.5 mgs IV is giving as a single dose on 5th August (H128). Co-proxamol is given from 5th 8th August (H128) and then replaced by Paracetamol written up on the 'as required' part of the drug chart, which she receives almost every day, until the 16th August (H175). The discharge letter mentions her regular drugs of Allopurinol, Bumetanide, Digoxin and Slow K, but does not mention any analgesia (H44).
- 3.11 She is seen by Dr Lord on 14th August (25-26). She notes that Mrs Lake's appetite is poor, is in atrial fibrillation and may have Sick Sinus Syndrome (an irregularity of cardiac rhythm). She has been dehydrated, hypokalaemic, and has a normochromic anaemia. She notes her leg ulcers and her pressure sores. She agrees to transfer her to the Gosport War Memorial Hospital and is uncertain as to whether there will be significant improvement.
- 3.12 She is admitted to Dryad Ward on 18th August (77) and the medical notes states that she had a fractured neck of femur and a past

medical history of angina and congestive cardiac failure. The rest of the medical notes, note that she is continent, transfers with two, needs help with ADL's, a Barthel of 6. The management plan is "get to know, gentle rehabilitation". The next line states "I am happy for the nursing staff to confirm death". The next and final line in the medical notes (77) is a nursing note from 21st August that Mrs Lake had died peacefully at 18.25 hrs.

- The nursing care plan, on admission, noted her pressure sores (375), her leg ulcer care (377) and notes that she communicates well (387) but does have some pain (387).
- On 18th August the nursing continuation notes state that she awoke distressed and anxious and was given Oramorphine (388), it states that she was very anxious and confused at times. On 19th August it said that she was comfortable at night, settled well, drowsy but rousable. Syringe driver satisfactory. On 20th August it stated continued to deteriorate. The nursing summary (394) states on 18th August, pleasant lady, happy to be here. On 19th August at 11.50 am she complains of chest pain and looks "grey around mouth". Oramorphine is given. She is noted to be very anxious and the doctor is notified. The pain is apparently only relieved for short period and she is commenced on a syringe drive.

On 20th August she continued to deteriorate overnight, the family have been informed and "very bubbly". On 21st August she deteriorates slowly.

- 3.15 Drug Chart Review: Admission on 18th August, Digoxin, Slow K, Bumetanide and Allopurinol are written up as per the discharge note from Haslar (369). On the 'as required' part of the drug chart (369) Oramorphine 10 mgs in 5 mls, 2.5 5 mgs is written up together with Temazepam. No Temazepam is given but 3 doses of Oramorph are given, one on the 18th August and two doses on 19th August.
- 3.16 On 19th August (368) Diamorphine 20 200 mgs sub cut in 24 hours is written up 20 mgs is started on 19th August, 20 mgs is started on 20th August, then discarded, and 40 mgs started, on 21st August 60 mgs is started. Hyoscine 200-800 micrograms subcut in 24 hours is also prescribed on 19th August. 400 micrograms is started on 20th August and replaced later in the day by 800 micrograms, which is continued on 21st August. Midazolam 20 80 mgs subcut in 24 hours is written up and 20 mgs prescribed on 20th August, replaced later in

the day by 40 mgs and finally by 60 mgs on 21st August.

Drug	Date prescribed	Prescribed as	Prescriber	Given
Diamorphine	05/08	2.5 – 5.0 mgs IV/I/M PRN	? (at Hasler)	05/08 1300 2.5 mgs
Co-proxamol	06/08	T – TT oral hourly PRN	(at Hasler)	06/08 2 doses 07/08 3 doses
Paracetamol	08/08	1 gram oral PRN	(at Hasler)	1 or 2 doses most days 08/08 – 16/08
Oramorphine	18/08	10 mg in 5 mls oral 2.5 – 5 mls 4 hourly PRN	Barton (GWMH)	18/08 1415 5 mgs 19/08 0015 10 mgs 19/08 1150 10 mgs
Diamorphine	?	20 - 200 mgs SC in 24 hours Regular	Barton (GWMH)	19/08 1600 20 mgs 20/08 0915 20 mgs stopped and restarted 20/08 1630 40 mgs stopped and restarted 21/08 0735 60 mgs
Midazolam	?	20-80 mgs S/C in 24 hours PRN Regular	Barton (GWMH)	19/08 1600 20 mgs 20/08 0915 20 mgs stopped and restarted 20/08 1630 40 mgs stopped and restarted 21/08 0735 60 mgs

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

- 4.1 This section will consider whether there were any actions so serious that they might amount to gross negligence or any unlawful acts, or deliberate unlawful killing in the care of Ruby Lake. Also whether there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Ruby Lake, in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.
- 4.2 Mrs Lake had a number of chronic diseases prior to her terminal admission following a fractured neck of femur. She had cardiac disease with known atrial fibrillation, aortic sclerosis and heart failure, documented in 1993. She also had not just osteoarthritis but an auto-immune arthritis that was thought variously to be either rheumatoid arthritis or variant auto-immune arthritis (the CREST syndrome). She also had problems as a result of her long-standing varicose swelling of her lower limbs, with many

years of unresolved and very painful leg ulcers. Finally she had impaired renal function, developed mild acute renal failure when she was given on occasion, non-steroidal anti-inflammatory drugs.

- 4.3 She is admitted by her GP into a GP bed consultant ward in June 1998. Beyond measuring her blood pressure, there is no medical clerking and the medical notes are rudimentary at best. Significant information is available from the nursing cardex, which confirms that she is continent and there is no confusion. However, she does have some dependency with a Barthel of 12. Her pain relief is increased by adding Tramadol (an oral opiate like drug) to her Co proxamol and she is able to be discharged home, having been seen by the Dermatologist.
- She subsequently has a fall and suffers a fractured neck of femur. She is admitted to the Haslar Hospital for operative repair. There is always a very significant mortality and morbidity after fractured neck of femurs in old people, particularly in those who have previous cardiac and other chronic diseases.
- 4.5 She is clearly unwell on 10th August, this is thought to have probably have been a chest infection and she is treated appropriately with antibiotics. However, her pyrexia never actually settles prior to discharge. She also suffers from at least one other episode of chest pain, again no diagnosis is come to in the medical notes, although her ECGs do appear to have changed during her admission, suggesting that this was either coronary event, including a possible heart attack or even a possible pulmonary embolus, despite her prophylactic anti-DVT therapy.
- She is documented to be confused on many evenings, including the evening before transfer from Haslar to Gosport War Memorial Hospital. There may be multiple reasons for this, simply having an operation after a fractured neck of femur can cause acute confusion which is more obvious in the evenings. Chest infections and cardiac events can also cause acute confusion. She was on regular oral Co proxamol and Tramadol prior to her admission. The Tramadol was not continued and the Co proxamol was replaced after a few days with Paracetamol which she does receive on a regular basis for pain, although it is not clear whether this is pain from her leg ulcers or her chest. It is therefore possible that she is also getting drug withdrawal symptoms and this is a further contributing factor to cause her restlessness and confusion at night.

- 4.7 She is seen by Dr Lord who does a thorough assessment and arranges for an appropriate transfer to Gosport War Memorial Hospital. Dr Lord does not mention pain management as an issue. It is clear though from the notes that on the day of transfer she is still not right. She had been pyrexial the day before, she had been confused the night before transfer and she is more breathless needing oxygen on the day of transfer. It might have been wiser not to transfer her in this unstable clinical state.
- When she is transferred to the Gosport War Memorial Hospital she is seen by Dr Barton who fails to record a clinical examination, apart from a statement regarding her functional status, that she is catheterised, needs two to transfer and needs help with ADL and documents a Barthel of 6. An opportunity to assess her apparent unstable clinical state appears to have been missed. The nursing cardex states the Bartel is 9 (373) and that in the nursing cardex, she can wash with the aid of one and is independent in feeding.
- The continuation notes of Dr Barton (77) then mention rehabilitation with a statement about being happy for the nursing staff to confirm death. There are no further medical notes at all and in view of the subsequent changing clinical condition documented in the nursing cardex on 19th August and that the nurses contacted the doctor (394) this is a poor standard of care. It also makes it very difficult to assess whether appropriate medical management was given to Mrs. Lake.
- 4.10 On admission the regular drugs being prescribed at Haslar were continued but the Paracetamol and Tramadol she had received in the Gosport War Memorial Hospital only a month before were not prescribed, nor was any other milder analgesia such as Paracetamol. The only analgesia written up was Oramorphine on the 'as required' part of the drug prescription. While it is probably appropriate for somebody who might have been having episodes of angina and left ventricular failure while in Gosport to have a Morphine drug available for nurses to give, it is very poor prescribing to write up no other form of analgesia, particularly if a doctor is not on site. The nursing staff could have no alternative but to go straight to a strong opioid analgesia. On her first night she is documented as anxious and confused. This is then treated by giving her two doses of Oramorphine despite there being no record in the medical or nursing cardex that it was pain causing this confusion. It should be noted this was probably no different from her evenings in Haslar which did not need any specific medication management. She also had Temazepam available on the drug chart to be used as a night time sedative if needed. In

my view this is poor nursing and medical care in the management of confusion in the evening.

- 4.11 On 19th August an event happened at 11.50 in the morning with the nursing notes recording that she had marked chest pain and was grey around her mouth. This could have been a heart attack, it could have been a pulmonary embolus, it could have been another episode of angina, it could simply have been some non-specific chest pain. No investigations are put in train to make a diagnosis, she does not appear to have been medically assessed, or if she was it was not recorded in the notes and would be poor medical practice. However, if the patient was seriously distressed, it would have been appropriate to have given the Oramorphine 10 mgs that was written up on the 'as required' side of the drug chart. The first aim would be to relieve distress while a diagnosis was made.
- 4.12 Later on 19th August s syringe driver is started containing Diamorphine 20 mgs and 20 mgs of Midazolam. The only justification for this is recorded in the nursing notes (394) where it says pain is relieved for a short period. I am unable to find any records of observations, for example, pulse or blood pressure while the patient continues to have pain.
- 4.13 The syringe driver is continued the next day and Hyoscine is added and the dose of Diamorphine, Midazolam and Hyoscine all increase during the afternoon of the 20th and again when the syringe driver is replaced on 21st. Mrs Lake dies peacefully on 21st August.
- 4.14 Diamorphine is specifically prescribed for pain, is commonly used for pain in cardiac disease as well as in terminal care.

 Diamorphine is compatible with Midazolam and can be mixed in the same syringe driver. Diamorphine subcutaneously after oral morphine is usually given at a maximum ratio of 1 to 2 (up to 10 mgs of Diamorphine for 20 mgs or Oramorphine). She had received 20 mgs of Oramorphine on 19th and appears to have been in continuing pain so I think it is probably reasonable to have started with 20 mgs of Diamorphine in the syringe driver over the first 24 hours.
- 4.15 Midazolam is widely used subcutaneously as doses from 5 80 mgs per 24 hours and is particularly used for terminal restlessness. The dose of Midazolam used was 20 mgs for the first 24 hours, which is within current guidance, although many believe that elderly patients need a lower dose of 5 20 mgs per

24 hours (palliative care). (Chapter 23 in the Brocklehurst's Text Book of Geriatric Medicines 6th Edition 2003). The original dose of Diamorphine appeared to be for continued chest pain. It is unusual to use continuous Diamorphine for chest pain without making a specific diagnosis. It is possible the patient had had a myocardial infarction and was now in cardiogenic shock. In that case it would be very reasonable to use a syringe driver and indeed to add Midazolam and Hyoscine over the subsequent 48 hours. This can only be supposition without adequate documentation.

4.16 In my view it is impossible from the notes to determine the cause of death and a Coroner's Post Mortem should have been held.

5. OPINION

- Ruby Lake an 84-year-old lady with a number of chronic diseases, suffers a fall and a fractured neck of femur in August 1998. She is admitted to hospital and has operative treatment but develops post-operative complications including chest infection, chest pain and confusion at night and subsequently deteriorates and dies in the Gosport War Memorial Hospital.
- In my view a major problem in assessing this case is the poor documentation in Gosport Hospital in both the medical and nursing notes, making a retrospective assessment of her progress difficult. However, I believe the overall standard of medical care in the Gosport War Memorial Hospital to be negligent, in particular:
 - The lack of any documented medical examination on admission, in a patient that appeared to be clinical unsuitable.
 - The failure to prescribe milder oral analgesia on admission to the Gosport War Memorial Hospital.
 - The use of Oramorphine for 'anxiety and confusion' on the first night in the Gosport War Memorial Hospital.
 - The apparent failure to attend the patient when she developed chest pain and became unwell on the 19th August.
 - The failure to attempt to make any diagnosis or assessment ont the change of conditions on 19th August.
 - The decision to start a syringe driver on the 19th August without any record of the medical justification.
 - The failure to record any justification for the decision to increase the doses of Diamorphine and Midazolam on the 20th and 21st August.
- 5.3 The use of the drug chart was also significantly deficient, in particular:

- The prescription of a large range of a controlled drug (see my generic report).
- The failure to date prescriptions on the regular side of the drug chart
- The failure to cross out and rewrite prescriptions on the regular side of the drug chart when changing controlled drug dosages.
- The failure to write dosages of controlled drugs in words and figures as well as total dosages to be given.
- 5.4 Without a proven diagnosis, it is possible that the combination of Diamorphine and Midazolam together with the Hyoscine in a syringe driver contributed in part to Mrs Lake's death. However, I am unable to satisfy myself to the standard of beyond reasonable doubt that it made more than a minimal contribution.

6. EXPERTS' DECLARATION

- 1. I understand that my overriding duty is to the court, both in preparing reports and in giving oral evidence. I have complied and will continue to comply with that duty.
- 2. I have set out in my report what I understand from those instructing me to be the questions in respect of which my opinion as an expert are required.
- 3. I have done my best, in preparing this report, to be accurate and complete. I have mentioned all matters, which I regard as relevant to the opinions I have expressed. All of the matters on which I have expressed an opinion lie within my field of expertise.
- 4. I have drawn to the attention of the court all matters, of which I am aware, which might adversely affect my opinion.
- 5. Wherever I have no personal knowledge, I have indicated the source of factual information.
- 6. I have not included anything in this report, which has been suggested to me by anyone, including the lawyers instructing me, without forming my own independent view of the matter.
- 7. Where, in my view, there is a range of reasonable opinion, I have indicated the extent of that range in the report.
- 8. At the time of signing the report I consider it to be complete and accurate. I will notify those instructing me if, for any reason, I subsequently consider that the report requires any correction or qualification.
- 9. I understand that this report will be the evidence that I will give under oath, subject to any correction or qualification I may make before swearing to its veracity.

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

7. STATEMENT OF TRUTH

·	n my report are within my own knowledge I
•	pelieve them to be true, and the opinions I
have expressed represent my true and co	omplete professional opinion.
Signature:	Date: