
DRAFT OVERVIEW
OF
SHEILA GREGORY (BJC/21 and JR/12)

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AT THE REQUEST OF: Hampshire Constabulary

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1. INSTRUCTIONS

To examine and provide a preliminary overview of the case of Sheila Gregory.

2. DOCUMENTATION

This Report is based on the following documents:

[1] Full paper set of medical records of Sheila Gregory (BJC/21 and JR/12).

[2] Full set of medical records of Sheila Gregory on CD-ROM (BJC/21).

[3] Hampshire Constabulary summary of care of Sheila Gregory.

3. COMMENTS

Note: These comments are based on a preliminary read through the case notes of Sheila Gregory. They are made without prejudice and a more detailed review may produce a report with differing comments and conclusions.

For brevity and in keeping with the purpose of this overview I have restricted my comments under the following sub-headings.

Was pain clearly documented as a problem and assessed?

On the 15th August 1999, Mrs Sheila Gregory fell and fractured her right hip (neck of femur) and was admitted to the Royal Hospital Haslar. The fracture was treated surgically with a dynamic hip screw on the 16th August 1999. For postoperative analgesia, Mrs Gregory required occasional doses of 'weak' opioid analgesics as required (p.r.n.); initially she took no more than two doses of tramadol 100mg (which may have worsened her confusion) and subsequently co-dydramol (2 tablets; each tablet contains paracetamol 500mg and dihydrocodeine 10mg) per day. Pain did not appear to be a problem when Mrs Gregory was reviewed by Dr Tandy on the 24th August 1999, nor in the transfer

letter written on the day of her transfer to Dryad Ward on the 3rd September 1999, at which time she was mobilising with a zimmer frame and the help of one other person. There was no mention of pain as a problem in the medical or nursing notes on her transfer to Dryad Ward. On an assessment sheet, which although undated appears as to have been filled in at the time of her transfer, the section on pain is completed to suggest that pain was present but controlled (page 243 of 346).

On the 6th September 1999, the medical notes record that Mrs Gregory had pain and tenderness in the right 'snuff box' (wrist). This could have been injured when she fell, and an X-ray was carried out to exclude a fracture. I presume it was because of this wrist pain, that paracetamol was commenced regularly (1G four times a day) and continued until 23rd October 1999, after which the administration became erratic. There was no further mention of any pain in the medical notes. In the nursing care plan, other mentions of pain were:

- 22nd October 1999 - indigestion, given Gaviscon (an antacid)
- 25th October 1999 - pain in the right leg, given paracetamol
- 16th November 1999 - 'discomfort', site not specified, given paracetamol
- 17th November 1999 - pain in neck (followed by unintelligible word ?arm; page 204/346), given paracetamol
- 19th November 1999 - breathless and pain in shoulder, given frusemide (a diuretic) but no additional analgesia. Was receiving regular morphine at this point.

Apart from the pain in the right wrist, no medical assessment is documented and the underlying cause of these other pains is unclear. Nevertheless, they were generally treated with paracetamol only.

Was the management of the pain appropriate?

On her transfer to Dryad Ward on the 3rd September 1999, Mrs Gregory was prescribed 2 co-dydramol tablets p.r.n., as at Royal Hospital Haslar. In my opinion, this was appropriate.

She was also prescribed oral morphine (Oramorph) 5–10mg every 4h p.r.n. It is unclear from the medical notes why this was considered necessary, particularly as Mrs Gregory had only been requiring occasional doses of co-dydramol. Some practitioners do use small doses of morphine rather than dihydrocodeine, and although a dose of 5–10mg is in keeping with the BNF recommendations, given Mrs Gregory's advanced age, a dose of morphine 2.5mg p.r.n. may well have sufficed. It would also have equated more closely to her dose of co-dydramol; morphine is 10 times more potent as dihydrocodeine and hence two tablets of co-dydramol (20mg dihydrocodeine) is equivalent to 2mg morphine.

On the day of her transfer, Mrs Gregory was also prescribed diamorphine 20–200mg SC/24h, hyoscine (hydrobromide) 200–800microgram SC/24h and midazolam 20–80mg SC/24h by syringe driver. There is nothing documented that supports the prescription of these drugs; at the time of her transfer there was no suggestion that Mrs Gregory had symptoms that required these drugs in these doses. Further, the medical plan for Mrs Gregory was for gentle rehabilitation. However, Mrs Gregory did not receive any diamorphine by syringe driver until 20th November 1999.

The subsequent prescription and administration of opioids does not appear to have been primarily for pain, and the exact reason for their use should be clarified. On the 17th November 1999 the nursing summary notes record that Mrs Gregory was not very well in the evening and was becoming quite distressed and breathless at times and that morphine 5mg was given to relieve

her distress with good effect. In my opinion, opioids are not indicated as a non-specific treatment of 'distress.' If Mrs Gregory was distressed because of her breathlessness, it would have been most appropriate to have first assessed and treated any underlying cause, when possible and appropriate. There are many reasons why someone may become breathless, many of which are relevant given Mrs Gregory's past medical history, e.g. chest infection, asthma/chronic obstructive airways disease, atrial fibrillation and heart failure. The latter may be particularly relevant as Mrs Gregory's only heart failure treatment she had been receiving (captopril) was discontinued at Haslar, possibly because of low blood pressure peri-operatively.

On the 18th November 1999, she was seen by Dr Barton, and the medical notes conclude that Mrs Gregory may have had a further CVA (cerebrovascular accident; a stroke), although the medical history/physical findings that led to this conclusion are not documented. There was no documentation of breathlessness or distress, and no documentation that a physical examination had taken place. Oral morphine was commenced regularly (5mg every four hours and 10mg at night). The nursing summary note seems to indicate that the morphine was commenced because Mrs Gregory was feeling anxious. In my opinion, this is not an appropriate use of morphine.

The drug chart was rewritten on the 18th November 1999, and again included prescriptions for diamorphine (now in a range of 20–80mg SC/24h), hyoscine (hydrobromide) 200–800microgram SC/24h and midazolam 20–80mg SC/24h by syringe driver. On the afternoon of the 20th November 1999, a syringe driver was commenced containing diamorphine 20mg and cyclizine (an anti-emetic) 50mg SC over 24h. This was continued on the 21st November 1999 and Mrs Gregory died at 17.20h. Mrs Gregory had been experiencing nausea and

vomiting and this is an indication for the use of a syringe driver containing an anti-emetic. The cyclizine was prescribed as a range (50–200mg/24h) but I note Mrs Gregory received a stat dose of 50mg at 13.15h on 20th November 1999. The dose in the syringe driver (50mg/24h) was smaller than that generally given (150mg/24h). In order to comment on the appropriateness of the use of the diamorphine, clarification is required on the indication for the oral morphine.

Were excessive doses of morphine/diamorphine/midazolam administered?

In my opinion, on the day of her transfer, the prescription of diamorphine 20–200mg SC/24h and midazolam 20–80mg SC/24h by syringe driver appears unnecessary and inappropriate. However, Mrs Gregory did not receive any diamorphine by syringe driver until 20th November 1999.

On the 18th November 1999, Mrs Gregory was seen by Dr Barton and commenced on oral morphine 5mg every 4h and 10mg at night. The reason for this should be clarified. It is not unusual for a double dose to be given at 22.00h, to try and avoid the need for a 02.00h dose. This starting dose is in keeping with the BNF (i.e. 30mg/24h). However, given Mrs Gregory's advanced age, a smaller dose may well have sufficed and would have been more appropriate in my opinion (i.e. 15mg/24h). Mrs Gregory received this dose of oral morphine for 48h, between the 18–20th November 1999.

The drug chart was rewritten on the 18th November 1999 and again included prescriptions for diamorphine 20–80mg SC over 24h, hyoscine and midazolam. Mrs Gregory commenced a syringe driver containing 20mg of diamorphine on the 20th November at 17.00h. To calculate an appropriate dose of SC diamorphine, the daily oral morphine dose is divided by 2 or more generally 3. Given that Mrs Gregory had been receiving 30mg/24h of oral morphine, her SC

diamorphine dose should thus have been 10–15mg/24h rather than the 20mg/24h she received. Although these figures do not differ greatly, they may be important in an elderly patient and it should be ascertained how Dr Barton calculated or determined that the dose of diamorphine 20mg/24h was appropriate for Mrs Gregory.

Was the death of the patient anticipated?

Mrs Gregory was a frail 91 year old with significant medical problems, namely heart failure, atrial fibrillation and a probable cerebrovascular accident (CVA) who had fell and fractured her right hip. She was confused at times. Following transfer to Dryad ward Mrs Gregory was slow to mobilise. She possibly sustained a further small stroke causing the left side of her face to droop and her to lean to the left when standing. Her mobility failed to improve significantly. On the 27th September 1999, she was noted to be 'generally less well' and on the 11th October 1999, 'very dependent and delightfully (usually) confused' and the aim then became nursing home placement. On the 15th November 1999, she was noted to be frailer, less well and to have a chest infection. She also had occasional bouts of nausea. On the 18th November 1999, a further deterioration in Mrs Gregory's general condition was noted and it was considered that she may have had a further CVA. She was commenced on oral opioids for a reason that remains to be clarified. Mrs Gregory subsequently declined further and was commenced on a syringe driver on the 20th November 1999 and died on the 22nd November 1999 at 17.20h. Earlier on that day, Mrs Gregory was reviewed by Dr Reid, who noted her to be able to give short verbal responses, to have a respiratory rate of 24 breaths/min and her chest clear at (unintelligible word; page 70/346).

Thus, Mrs Gregory's physical decline had been documented over several weeks. Part of her deterioration appeared to have been the symptom of breathlessness. It is unclear from the medical notes, what the underlying cause of this was, although it may have been multifactorial; Mrs Gregory had asthma/chronic obstructive airways disease, heart failure and a chest infection. The use of frusemide IM and subsequently orally does suggest that heart failure was considered to be a contributing factor. Contrary to this would be the finding of a clear chest on the 15th and the 22nd November 1999; in heart failure generally crackles, caused by excess fluid, are audible in the chest.

The reason for the prescription of the oral morphine and subsequently the diamorphine remains to be clarified. However, the fact that Mrs Gregory was capable of responding and had a respiratory rate of 24 breaths/min suggests that the dose of diamorphine she was receiving was not excessive to the point of rendering her unresponsive or depressing her respiration.

4. CONCLUSION

In summary, pain did not appear to be a major problem for Mrs Gregory at the time of her transfer to Dryad Ward. Any pain present appeared satisfactorily controlled with p.r.n. doses of co-dydramol 2 tablets, twice a day at most. During Mrs Gregory's time on Dryad Ward, she appears to have experienced a number of pains. Apart from the pain in the right wrist, no medical assessment is documented and their underlying cause is unclear. Nevertheless, they were generally treated with paracetamol only. Thus, in my opinion, from a pain point of view, there was no justification for the prescription of diamorphine, hyoscine and midazolam to be given in a syringe driver on the day that she was transferred to Dryad Ward and when the drug chart was rewritten on the 18th

November 1999. However, she did not receive any diamorphine until 20th November 1999. One obvious conclusion, that should be explored further, is that the use of these drugs, in these doses, was part of a 'standard' approach, that had little, if any, immediate consideration or relevance to an individual patient. The reasoning behind such an approach should be identified.

In my opinion, from a pain point of view, there was no justification for the prescription of the regular oral morphine on the 18th November 1999 and the indication for its use needs to be determined. If it was for anxiety, as the nursing notes suggest, this in my opinion is not an appropriate use of morphine. However, opioids are indicated for the relief of symptoms other than pain, e.g. cough and breathlessness, and Mrs Gregory did have breathlessness. In my experience, morphine is widely used to relieve breathlessness (generally occurring at rest) in patients with cancer. It is used less in non-cancer conditions causing breathlessness, although this practice may be increasing. Nevertheless, it is generally used for symptomatic relief of breathlessness that persists despite the optimal treatment of the underlying cause. In this regard, there is a lack of documentation in the medical notes that an assessment was made of Mrs Gregory's medical condition around the times that breathlessness seemed a particular problem, e.g. 17th and 19th November 1999. If a thorough medical assessment of Mrs Gregory's breathlessness on the 17th November 1999 had considered it to be due to heart failure, then appropriate management of her heart failure could be seen as a more appropriate response to her episodes of breathlessness and anxiety rather than the use of morphine per se. On the 19th November 1999, a stat dose of frusemide 40mg was given IM at 15.45h because of breathlessness. In my experience, it is generally the case that a patient who is considered to be a degree of heart failure sufficient to

warrant parenteral frusemide, also warrants a medical review. Given this occurred at 15.45h, I would have considered it appropriate for Dr Barton/the doctor on call to have assessed Mrs Gregory as soon as was possible the same day, and not to have left until the following morning. Even so, there was no medical notes entry for 20th November 1999, although regular oral frusemide 40mg once a day was prescribed. I am not a cardiologist however, and the opinion of one could be sought if considered necessary regarding the above.

The use of a syringe driver with an anti-emetic was reasonable, given that Mrs Gregory was experiencing nausea and vomiting, and this is an indication for its use. The appropriateness of the use of diamorphine depends on the indication for the oral morphine.

However, the above issues aside, Mrs Gregory's decline was noted over a number of weeks and this would be in keeping with a natural decline into a terminal phase. Further, whatever the reason was for the use of diamorphine, the physical findings on the day of Mrs Gregory's death would suggest that the dose she was receiving was unlikely to have been excessive to the degree that it rendered her unresponsive or was associated with respiratory depression.