The rehabilitation experience of an elderly female patient following a fractured neck of femur compounded by *Clostridium difficile* infection

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Summary  One of the most common orthopaedic injuries sustained by elderly women in the UK is a proximal fractured femur, often following a fall. This in itself is of great concern to both patient and caring relatives due to the morbidity and 'year on' mortality rates typically reported as 20–35% within one year (Goldacre, M.J., Roberts, S.E., Yates, D., 2007. Mortality after admission to hospital with fractured neck of femur: database study. British Medical Journal, 325, 868–869.). This article follows some of the issues experienced by an elderly female patient following a proximal fractured femur, compounded by the emergence of a *Clostridium difficile* infection during the rehabilitation period. Based on the events as told by the carer this article relays the frustrations of an elderly female patient who struggles to resume her normal life and the importance of relaying accurate information in care.

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Editor’s comments  It is really important to acknowledge that we don’t always get things right. If judged by sheer volume elderly patients with a fracture of the hip are the most significant group of orthopaedic trauma patients. By the very nature of their injuries and co-morbidities as well as their age they are already likely to suffer a lengthy and difficult recovery. This paper highlights how health care which is not planned and executed carefully can mean that not only does the quality of the experience of that care suffer, but the quality of life for the patient is severely affected.

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Repair of a proximal fractured femur is commonly performed across the UK and constitutes the majority of elderly orthopaedic operations undertaken (Health and Social Care Information Centre, 2008). However, a good orthopaedic ‘fixation’ does not negate the possibility of those professionally caring for such patients passing on an infection that can be more debilitating than the original orthopaedic injury.

Good hand hygiene has long been an issue in care settings where patients can be at risk by those who care for them (NMC, 2006). However, in the case of Clostridium difficile the effect of poor attention to hand hygiene can exacerbate an already difficult nursing problem and may lead to a prolonged episode of care.

This case follows an 88 year old woman who is registered blind, has non-insulin dependant diabetes, a pacemaker fitted and lives alone in her own house. She is fiercely independent, walking regularly to the local shops and copes well with the activities of daily living. Despite her sight impairment she gains lots of enjoyment from reading large print novels, and watching television, she also enjoys going out for meals, visiting friends, and generally engaging with life. Her main carer is a trained nurse who visits twice daily to administer eye drops and check on her.

Mid April she missed her footing on the stairs, fell and fractured her left proximal femur. She was taken to the local accident and emergency unit where she received emergency care and was transferred to the trauma ward to await dynamic hip screw repair of her injury. According to the Royal College of Physicians it is indicated that such injuries should be repaired within 24 h (Bottle and Aylin, 2006), this said, she was not listed for surgery until some 48 h later, despite having a sliding scale insulin infusion and being kept ‘nil by mouth’. However, the nursing staff on the ward advocated for her and she was ‘slotted in’ for the operation the following day. She underwent surgery with a spinal anaesthetic, due to her medical condition, and initially made an uneventful post-op recovery.

Post-operatively on day two she developed hypotension, anaemia and hypoxia. This was identified and treated quickly and by post-operative day four this was resolving, but nursing staff were worried about her increasing confusion, as she was normally very lucid. On assessment she seemed to be hallucinating rather than in a state of confusion. She was perfectly able to score 10/10 on the ‘mini-mental state examination’ (Alzheimer’s Society, 2008), however, she clearly described the squirrels and rabbits running around her bed. She was convinced that the nursing staff were trying to have her ‘certified’ as being mentally unstable, to the extent of refusing to take any medication she was unfamiliar with. Medical staff thought this could be due to an infection (rather than the codeine she was being prescribed for pain) and she was commenced on cefuroxime and metronidazole. It is well recognised that broad spectrum antibiotics contribute to the development of C. difficile in the elderly (Nelson, 2007), so unfortunately two days later she was transferred to the local community hospital, totally recovered from her ‘confusion’ but having contracted C. difficile. At this stage vancomycin was commenced.

The Health Protection Agency figures identify some 55,636 cases of C. difficile in 2006 compared to 44,563 cases in 2004, for patients aged 65 years and above in England (Health Protection Agency, 2007), which seems to indicate an increasing problem. This has also been recognised by the UK Department of Health (2008) who has introduced new measures to accurately record episodes of C. difficile through a mandatory reporting system being rolled out to trusts through 2008. The bacterium manufactures spores which are difficult to eradicate. Even alcohol gels found guarding most UK hospital wards and departments are ineffective against the bacteria. This said, it is hand washing that remains one of the main lines of defence against the spread of this bacterium with the need for good hand hygiene constantly reiterated by the UK Nursing and Midwifery Council (2006). Along with hand hygiene it is worth noting that a potential vector of infection is any shared equipment between patients. Walker et al. (2006) isolated C. difficile on 33% of blood pressure cuffs - although the sample size related to these findings was low at only 24 cuffs.

One question constantly asked by the patient was ‘why was I put on antibiotics when it was anti-biotics that caused the problem in the first place’? Educating patients about their medication is an important aspect of care but even more so in these situations (Dawson and Hennell, 2007). Patients have to live with the effects of prescribed medication long after the acute care phase has ended. The physical and psychological effects that C. difficile can cause are often only witnessed in transitory phases by those who nurse such patients in acute settings. The long term recovery can seemingly drain even the most organised and resolute of patients or carers.

C. difficile is found in the gut of around 3% of healthy adults and 66% of infants. In health, the normal bacterial activity of the intestines keeps the balance tilted in health’s favour. However, when broad spectrum antibiotics are used to treat
infections it is this balance that can be disturbed so that *C. difficile* rapidly produces toxins and causes illness (Easmon and Jeljaszewicz, 1982). Patients with proximal fractured femur are often prescribed broad spectrum antibiotics prior to surgery and whilst these are prescribed with the best of intentions they may be the catalyst to activate the condition. Nursing vigilance must remain high in such situations so that the early detection and subsequent treatment strategies can be instigated to prevent unnecessary spread of this bacterium.

The patient was continually incontinent of faeces and had to wear pads that contributed to her developing a grade 2 (Ayello and Braden, 2002) pressure sore on her sacrum. Weight loss was a great nursing concern as she lost almost two stones in weight over a 3 week period prompting a dieticians input. She lost her appetite, had relentless abdominal pain and was constantly in tears asking why she had come into hospital for one thing and yet had ‘picked’ up another.

*C. difficile* drained the patients strength in that she could not cope with her orthopaedic rehabilitation and the demands of physiotherapy, yet she tried and tried again as she wanted to ‘get better’, insisting she ‘had her treatment’. To those watching attempts at ambulating would likely appear tortuous and desperate as the patient knew that this was a requirement for her discharge.

Events such as going to the toilet became times of tearful frustration as the patient complained that her ‘bottom felt like a hot cross bun’ as it ‘sticks to the seat’ and she was waiting for what ‘felt like hours’ until staff were available to clean and safely transfer her.

However, no matter how much it was pointed out that she was in a clean and safe ward, that she was washed and dressed daily, it was the fact of sitting on the toilet, coping with both a hip fracture repair and a pressure sore that influenced the patient’s view of her care. In some cases the priorities of the care staff are poles away from those of the patient, but these concerns need addressing so rehabilitation is not stalled because of them (Pilgrim Projects Limited, 2008).

After 8 weeks on the ward with no significant improvement in her condition the notion of ‘bed blocking’ became a feature of conversations between carers. It is important that attitudes towards patients who are deemed ‘bed blocking’ are not portrayed negatively as Parsons (2003) notes, a positive attitude towards elderly patients must be pursued relinquishing the temptation to stereotype the elderly and exclude them from the decision making process. Bed blocking has been on the UK government’s agenda for many years and at one stage there was the suggestion of fines (in the early part of the decade) for hospitals unable to solve the problem. With an ever dependant elderly population accessing secondary care this problem is unlikely to be resolved easily (Lamb, 2007). A member of UK the parliament, also recognises the problem but identifies the dilemma between social care dependency and the expectancy that individuals and families should contribute to the care of their relatives (Department of Health, 2007a).

A home visit was arranged, as the installation of a stair lift and other aids had been organised. On the day of the home visit the patient was particularly unwell, and despite a suggestion to delay this visit she insisted it went ahead. The visit failed as she was so weak. Following this failed attempt to restore independence the possibility of a temporary care home place was discussed and a specialist residential home identified as a suitable environment for rehabilitation. Discussions with relatives were positive and they were told that she would get more intensive physiotherapy along with occupational therapy seven days a week and would be taken on home visits on a regular basis. All agreed that this plan mirrored the patient’s best interests.

She was transferred on Friday; by Monday she had stopped eating, and would not communicate. Unfortunately the ideal of intense physiotherapy evaporated to 2 h every morning during the week shared between the ten residents on the scheme. There was occupational therapy, when it could be fitted in, and she would only have two home visits prior to discharge from this scheme. Unfortunately this did not match the ‘seamless care’ picture painted on discharge but what had been discounted was where the funding for this rehabilitation would be sourced. The rehabilitation costs were to be picked up by a different local authority using a different policy to the local authority care staff had based assumptions on. A poor understanding of local care provision had resulted in contrived communications which in this instance had led to expectations that could not be fulfilled.

Communication remains one of the main tools in the arsenal of care provision but if muted can result in misery and mistrust (Wright, 2000). Clear negotiated strategies at discharge can pre-empt unforeseen pitfalls by the patient and carer. The UK Department of Health document, ‘Discharge from Hospital: Pathway, Process, Practice’ (2003a), states that discharge is not an ‘isolated event’ and that continuing care should be ‘organised’. Shepperd et al. (2003) recognise the difficulty in researching the impact of discharge planning due to the complexities of the process. However, all are clear in the fact that effective discharge planning is likely to affect read-
mission rates. If the patient and carers are not integral to the process, or provision is based upon assumptions, the discharge may well fail.

Over her first and only weekend on the residential scheme, *C. difficile* had returned with a vengeance, which it does at times (Easmon and Jeljaszewicz, 1982). Unfortunately this was not communicated to either the family or to the intensive home support service (IHSS) who were assigned to the next phase of care in this patient’s journey. This said, it was not entirely a one sided affair as the patient thought she had a ‘tummy bug’ and did not want to tell staff in case they refused to let her go home. As the taxi arrived at the residential home, the patient asked to go to the toilet. The fear of soiling in transit must be one of great concern. Whilst ‘accidents’ are seen as part of the daily work routine for care staff, the same event in a private taxi would seem to most patients an unacceptable action. On her return home at 2 p.m. she was immediately incontinent of faeces, causing her a great deal of distress. Unfortunately she had been discharged without any of the necessary equipment and relatives had to purchase disposable nappies to keep her comfortable until the next day when the IHSS nurse would be able to access her stores.

Not all carers are aware of the needs of elderly ill patients and the increased input such patient’s need. Discharge is an important phase and requires a degree of skill and knowledge in its preparation. The UK government paper ‘Caring for Older People’ (Department of Health, 2001) highlighted that it was often the junior staff that were responsible for assessing needs that should rightly be undertaken by more skilled practitioners. In this case it may have been that the staff caring for the patient did not link the stomach pain and loose stools to a reoccurrence of *C. difficile*. With many nursing homes, now down graded to residential homes with the inevitable loss of trained nursing staff, the signs and symptoms of problems such as *C. difficile* can easily be discounted as less serious complaints by the care workers. With the National Care Standards Agency (UK Department of Health, 2003b) recognising that care homes still have much to achieve, although improving, the ever vigilant public can access an individual care homes audit report via the internet and assess its performance.

A simple fall for this patient resulted in not only a proximal fractured femur for which recovery was routine, but weeks of disability due to the *C. difficile* bacteria. The questions asked of this situation were neither technically challenging nor difficult to remedy but rooted in good nursing care. Hand hygiene remains a high priority for care providers and has been targeted by the UK government for a long period of time, but the diligence of the majority can easily be undermined by the lapse of the minority. Seamless delivery of care services is an ideal which is often more complicated than it first appears and an area that Connecting for Health (2008) have highlighted as an important aspect of care delivery. Communication should be the forte of professional carers but superimposed on this is a culture of having to adhere to ‘breach’ time limits and the discharging of patients to the community or relatives at the earliest opportunity. Inadequate preparation and communication with the patient and relatives will likely lead to a poor care experience. The fact that some patients do contract *C. difficile* as a hospital acquired infection suggests they require an investment of time, education and nursing skill to optimise their recovery. The patient recovered and is making good progress but this common orthopaedic procedure was compounded by a bacterium which paled the original fixation into almost obscurity. With the elderly population over 65 years old rising in the UK there may be more challenges ahead regarding the care of our frail elderly, a recognised ‘risk’ by the UK Department of Health (2007b).

### References


