British Geriatrics Society

Orthogeriatric Models of Care

Best Practice guide 4.11 (reviewed November 2007))

1. Introduction

1.1 There are more than 300,000 fragility fractures each year in the UK and the incidence is rising – in part a consequence of the growth of the older population, but also due to an absolute increase in fracture rate. Geriatricians will encounter patients with fractures in a variety of clinical settings – falls clinics, intermediate care services, and acute medical wards for example. Falls are well described in a further compendium document. However, these guidelines relate primarily to the care of older people on orthopaedic wards, the majority of whom will have hip or other complex fractures. This often frail and vulnerable group of older people are particularly at the centre of the BGS campaign to improve dignity and quality of care (1).

1.2 Collaboration between surgeons and geriatricians in the management of older people following trauma was first developed in the late 1950's in Hastings (2). Day-to-day care was provided by a geriatrician, nurses trained in medicine, and therapy staff. The orthopaedic consultant contributed to goal-setting at the weekly post-operative multi-disciplinary meeting. Emphasis was placed on the restoration of mobility, and comprehensive medical assessment was advocated to address underlying physical and sensory impairments. Fifty years on these fundamental principles remain the same.

1.3 Older people with fragility fractures are a diverse group. Although some are fortunate to have comparatively few health problems, many have complex medical and psychiatric illness and require a range of therapeutic interventions. It is therefore not surprising that conclusive evidence of effectiveness of interventions has been difficult to demonstrate in RCTs. The Cochrane Review (3) (last updated in 2001) suggests that co-ordinated multidisciplinary care may improve patient outcomes. However the studies are heterogeneous in aims, interventions, and outcomes.

1.4 In the absence of robust trial evidence to support a particular model of care, these guidelines have been developed on the basis of available study and audit data (4,5,6,7,8,9), together with accepted good practice. Two other publications of particular importance in this field are The British Orthopaedic Association book, 'The Care of Fragility Fracture Patients'(10), which is currently being updated and The Scottish Intercollegiate Guidelines Network publication, 'Prevention and Management of Hip Fracture in Older People'(11). All trainees in Geriatric Medicine should be familiar with these texts and have experience of orthogeriatric working in their training.

2. Models of orthogeriatric care

2.1 Reactive consultation model. Patients referred to a geriatrician or other physician on an ad-hoc basis. Medical management and rehabilitation is managed primarily by the orthopaedic team. Patients are not all necessarily reviewed by a geriatrician. The BGS no longer supports or recommends this model of care.

2.2 Regular liaison visits to orthopaedic ward by a geriatrician or specialist nurse (hip fracture nurse) for ward rounds and multi-disciplinary rehabilitation meetings. The geriatrician or specialist nurse is accompanied by a member of the orthopaedic team. This has the advantage of providing continuity of medical care from week to week. Some patients are reviewed pre-operatively.

2.3 Pre- and peri-operative care provided by the orthopaedic team. Patients are transferred to a geriatric ward for rehabilitation. The break in continuity of care and change of ward environment is potentially disadvantageous, particularly for patients with post-operative confusion or pre-existing cognitive impairment. It may be several days until a patient is reviewed by a geriatrician.

2.4 Joint care between orthopaedic surgeons and geriatrician on a dedicated orthogeriatric ward. This arrangement enables easy collaboration and communication between specialists and minimises disruptive ward moves for patients. Pre-operative assessment by geriatricians, specialist roles such as hip fracture nurses, early rehabilitation, post-operative multidisciplinary care are all high quality features. Optimal medical care is provided throughout the week and out of hours “physician” care should be available.

2.5 Geriatricians should also be involved in early supported discharge and community rehabilitation schemes which optimise return home and the reaching of full potential.

2.6 The choice of model will be dependent on local resources. However, the BGS believes that 2.4 delivers best patient care. This is consistent with the NSF for Older People (12) which recommends that each hospital should have at least one ward developed as a centre of excellence for the care of older people with fractures.

2.7 All clinical services should partake in National multidisciplinary audits of falls and bone health services such as those organised by the Clinical Effectiveness and Evaluation Unit of the Royal College of Physicians of London (13).

2.8 Other useful audits such as the Scottish Hip Fracture Audit (14) which is likely to evolve into a UK wide national hip fracture registry will collect data on patient case mix, treatment (surgical, medical, anaesthetic and rehabilitation), outcomes and secondary prevention. This initiative is supported by the BOA and BGS and is likely to come to fruition in 2007. It will allow local services to compare with national benchmarks and quality standards, monitor performance over time.

3. The role of the Orthogeriatrician

3.1 Primarily this should be to promote the needs of the older person with trauma throughout their patient pathway and ensure that they receive the same high standard of specialist medical and nursing care within Orthopaedic services as they do within Care of Older People. This will entail the coordination of care between consultant Orthogeriatrician, Orthopaedic Surgeon, Anaesthetist and the multidisciplinary team with the involvement of other specialists as required. The focus should be on holistic care of the older person using a person-centred approach, bringing specialist care and services to them and avoiding unnecessary moves. This will require allocation of sufficient resource and an appropriate number of clinical and supporting Programmed Activities within the job plan, dependent upon the number of patients cared for.

3.2 The service may include some or all of the following:

- Peri-operative medical management to identify and treat acute medical illness, optimise the patient for surgical intervention, advise on complicated issues such as fluid balance, and the avoidance and treatment of medical complications of surgery.
- To ensure that once a patient is medically fit they are operated on within 24 hours by a surgeon and anaesthetist whose competency matches the complexity of the patient and that an appropriate level of post-operative care is available.
- To ensure that pain management is effective and safe.
- Psychiatric illness has been shown to predict poor outcome after surgery for hip fracture (15) and the cognitive function of patients should be assessed routinely on admission to hospital. The identification of delirium, dementia, depression and alcohol misuse will allow treatment to be initiated and involvement of Psychiatry of Old Age to be sought.
- To carry out a multidisciplinary falls assessment and link with the Falls Service where appropriate. This will include rationalisation of medications.
- To assess all patients with low trauma fractures for osteoporosis or other causes of pathological fracture, and prescribe treatment.
- To promote discharge planning from the point of admission with appropriate use of community services, liaison with the multi-disciplinary team and carers/relatives whilst taking patient wishes into account
- To ensure patients have the opportunity to maximise their rehabilitation potential within the hospital and community environment with the aim of returning to their previous place of residence if possible.
- To advise on complex ethical issues including end of life care and cardiopulmonary resuscitation.
- To be involved in morbidity and mortality review with the orthopaedic and anaesthetic teams.
- To be involved in training and audit, together with the development of evidence based pathways and guidelines.

4. The challenge for Orthogeriatrics

4.1 To provide a full service, one that incorporates all the different aspects of an orthogeriatric service, is time-consuming. The resources that are required for this should not be underestimated. Where a joint service between Orthopaedics and medicine for older people is agreed upon, resources should be made available from both services. Whichever model of care is chosen should be that that serves patients best and takes into account local resources. Where possible, excess moves from one unit to another should be avoided as this is disruptive for patient care and may delay rehabilitation.

4.2 Orthopaedic services have traditionally tended to prioritise elective patients ahead of trauma patients, particularly those that are older. Whilst this is understandable given the continued prominence of waiting list targets in the NHS agenda, neglecting the needs of older patients is a false economy and will lead to reduced efficiency in terms of bed management. It is essential to engage both Orthopaedic surgeons and managers in giving older patients the prominence they deserve when new services are designed.

4.3 From a clinical perspective, Orthogeriatricians are best placed to highlight the needs of patients with fragility fractures. This includes the need for timely operative intervention with appropriately trained personnel, and ensuring that specialist facilities such high dependency or intensive care units are not with-held from them on the grounds of age alone.

4.4 It is important to involve all members of the Multidisciplinary team in meeting the needs of older patients. This includes ensuring access to dieticians, speech therapists, chiropodists and continence advisors as well as occupational therapists and physiotherapists. Nurses should be appropriately trained in the care of older patients, with particular emphasis on pressure care, nutrition and continence as well as experience in caring for patients with mental health problems. Wards must be adequately staffed to ensure that appropriate care can be provided to patients who may be relatively time-intensive.

4.5 For a substantial minority of patients, admission to hospital with a hip fracture may mark the start of a significant decline in their health, with a progressive loss of independence, function and possibly life. Helping patients and their relatives to come to terms with such losses and recognising the limits of medical care is an important part of the role of the orthogeriatrician. However, in the right rehabilitation setting, a well-motivated and enthusiastic team can enable a patient to maximise their independence following a fracture. Above all, the challenge for the geriatrician working on an orthopaedic ward is to champion the rights of the older person, and ensure that everybody on the team treats their patients with the dignity and respect they deserve.

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