

RCPE Care of the Elderly Symposium 2010: Speakers' abstracts

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WHAT REALLY MATTERS TO PEOPLE WHO HAVE PARKINSON'S DISEASE

Margo MacDonald, MSP, Scottish Parliament, Edinburgh

As my life centres on my work and my home, the essential components that make it worthwhile, enjoyable, difficult, frustrating and so on are not much affected by my Parkinson's disease. My job demands a steady brain rather than steady hands. My children have left home so I work to my own agenda. The things I no longer do – walking, golf etc. – have been supplanted with less physically demanding pastimes.

One side effect of taking my pills is a desire to sleep at inconvenient times. There may be more, but I am too busy to notice. I suspect I have also been affected by a new reckless, spend, spend, spend attitude.

So far in the End of Life Bill's parliamentary journey, all of the officials who came from abroad to give evidence to the committee considering the Bill informed MSPs that not one of the horror stories regarding slippery slope, disabled and vulnerable people and the doctor/patient relationship had established themselves as an effect of assisted dying legislation in their countries.

THE MANAGEMENT OF NON-MOTOR MANIFESTATIONS OF PARKINSON'S DISEASE

Dr Graeme JA Macphee, Consultant Physician, Medicine for the Elderly, Southern General Hospital, Glasgow

Parkinson's disease (PD) is a chronic progressive neurodegenerative disorder. It is traditionally viewed as a motor syndrome, with a characteristic triad of tremor, rigidity and bradykinesia. In recent years there has been increasing recognition of the importance of the non-motor symptom complex. Non-motor symptoms (NMS) include cognitive, psychiatric, autonomic, sleep and sensory disorders, including pain. Some NMS such as olfactory disturbance, constipation, depression and rapid eye movement (REM) sleep behaviour disorder may even be premonitory features of PD, but all NMS become increasingly common with advancing disease.

A recent prospective study demonstrates that NMS dominate the clinical picture at 15 years. The Braak hypothesis posits a six-stage spread of Lewy body pathology, starting not in the substantia nigra but rather in

the olfactory bulb and brain stem, ascending as the disease progresses to the neocortex and then associated with hallucinosis and other psychiatric manifestations.

Non-motor symptoms are strong correlates of quality of life, both for carers and people with PD, and contribute to significant institutional costs on family and society. Many NMS are 'undeclared' and under-recognised by professionals, and the NMS QUEST 30-point questionnaire has been validated to facilitate rapid screening in the clinic. The 2010 Scottish Intercollegiate Guidelines Network (SIGN) guideline on PD highlights the importance of NMS as a major concern to people with PD and carers, and makes recommendations for the management of a number of neurobehavioural NMS.

This presentation will briefly review the NMS spectrum in PD, and discuss recommendations from the SIGN guideline on depression, sleep disturbance, cognitive impairment and impulse control disorder.

Further reading

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TELEHEALTH DEVELOPMENTS IN SCOTLAND

Mr James Ferguson, Clinical Director, Scottish Centre for Telehealth, Aberdeen

Communication lies at the heart of the art of medicine. Clinical care is based on the effective transfer of data between the patient and the healthcare provider: 'the consultation'. Traditional pathways of care derive from a time when chronic disease management in the elderly was not the main workload of the National Health Service (NHS). These pathways result in over-triage and inefficient use of resources, with patients regularly required to needlessly travel significant distances to access services. Government policy in all developed countries is to shift the balance of care from secondary to primary care.

There is mounting evidence of the effectiveness of telecommunications in the delivery of healthcare and this has been contributed to by the Scottish Centre for Telehealth (SCT). Among the benefits are improved care, more equitable access to services and improved cost-effectiveness of care delivery. The last of these is likely to be the most significant driver to effect a transformation of healthcare service delivery over the next five years.

Despite the mounting evidence base of the effectiveness of telehealth, there remains marked inertia to its introduction as a significant, and ultimately primary, method of accessing healthcare. To fully realise the potential of communications technology in healthcare requires widespread adoption both within and across health boards. This will require a change in the culture of the NHS in Scotland. As effective communication is a mandatory requirement for the delivery of healthcare, healthcare providers must regard adapting their practice to reflect developments and trends in communications techniques and technologies to be as important as using new medicines or diagnostic techniques.

Further reading

- Scottish Government. *The healthcare quality strategy for NHS Scotland*. Edinburgh: Scottish Government; 2010. Available from: <http://www.scotland.gov.uk/Resource/Doc/311667/0098354.pdf>
- Scottish Centre for Telehealth website: <http://www.sct.scot.nhs.uk>

SMART HOME TECHNOLOGY: DOES IT HELP FRAIL OLDER PEOPLE TO LIVE SAFELY AT HOME?

Mr Paddy Corscadden, Telecare Development Programme, City of Edinburgh District Council

Telecare provision in Scotland to support the ageing population has seen a dramatic increase in the past three years thanks in a large part to a Scottish Government National Telecare development programme.

Most local authorities across Scotland are now providing a 'telecare' or 'smart house' service, but how effective is the use of this technology in supporting older and frail people to live safely at home?

The ageing population and their care needs predicted for Scotland in the next 20 years will continue to place significant pressure on existing services and new and innovative ways of supporting these clients need to be implemented now to allow us to be ready for the challenges ahead.

Some key reasons that older people end up in long-term care or hospital in our experience are personal health issues (falls, medication issues and enuresis), home safety issues (fire, flood), 'wandering' and bogus callers.

Telecare can offer options to remove or reduce some of these issues to older people who want to remain in their own homes for as long as possible.

This presentation will explain what telecare has to offer, explaining the use of medication prompts, falls detection systems, monitored cooker isolation systems and door exit sensors and the impact they have in supporting the residents of Edinburgh in reducing or managing risks.

VASCULAR COGNITIVE IMPAIRMENT: EPIDEMIOLOGY, DIAGNOSIS AND MANAGEMENT

Professor Sandra Black, Brill Chair in Neurology, Sunnybrook Health Sciences Centre, University of Toronto, Canada

Vascular dementia (VaD) is thought to be the second most common cause of dementia, but in the elderly mixed vascular and Alzheimer's disease (AD) is the most common substrate for dementia. This has led some researchers to use the term vascular cognitive impairment to embrace patients with VaD, vascular cognitive impairment not dementia and mixed AD/vascular disease.

Criteria have been developed to distinguish VaD from AD, emphasising the need for evidence of stroke disease on a brain scan and focal neurological signs, as well as a temporal pattern with abrupt onset after a stroke or sudden stepwise cognitive decline. Vascular dementia has multiple aetiologies and occurs in a quarter to a third of patients after stroke, increasing long-term dependence and mortality.

That is just the tip of the iceberg, however. Silent strokes are ten times as prevalent as overt strokes, double the risk of dementia and triple the risk of stroke. Subcortical incidental white matter hyperintensities are even more common, being present in 95% of those over 65 years, with about 20% showing severe periventricular white matter disease. The resulting subcortical ischaemic vasculopathy is associated with a pattern of cognitive decline dominated by executive dysfunction, with gait difficulty, mood alterations and sometimes urinary incontinence. Short-term memory may be relatively intact. Co-morbid AD and strokes, including small lacunes, greatly increase the likelihood of expressing dementia as illustrated in the Nun Study, in which 61 out of 102 sisters met pathological criteria for AD, but only 57% met criteria for dementia; if lacunar infarcts were present, however, 93% were demented, suggesting a synergistic effect.

This co-morbid AD/cerebrovascular disease, so prevalent in the elderly, mandates aggressive management of treatable risk factors such as hypertension, cholesterol and diabetes. Indeed, some evidence suggests that hypertension treatment can prevent dementia. As in AD, there is evidence of a cholinergic deficit in VaD and white matter hyperintensities can sometimes selectively involve projections of the cholinergic pathway. This may partly explain why clinical trials of cholinesterase inhibitors in VaD have shown some cognitive benefit,

although functional and global benefits have been less reproducible. Hence, the cholinergic agents have not achieved regulatory approval for this indication. Therefore, the primary management of VaD remains careful risk assessment and management of the vascular and stroke risk factors.

The treatment of co-morbid conditions such as depression and encouraging physical activity and a heart-healthy lifestyle are also important, especially given that the major risk factors for heart attack and stroke are also risk factors for dementia. In fact, a major goal for vascular medicine through the control of risk factors is not just the prevention of stroke and heart attack but also that of dementia, particularly AD.

Further reading

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UNDERNUTRITION IN OLDER PEOPLE

Dr Helen Roberts, Clinical Senior Lecturer in Geriatric Medicine, University of Southampton

One in four hospital inpatients are malnourished, as are one fifth of care home residents; yet most undernutrition goes unrecognised and unmanaged. Patients aged over 80 years are twice as likely to become malnourished as those under 50 years, and high-risk groups include those recently discharged from hospital and free-dwelling older people receiving community services. In 2006 the cost to the NHS of undernutrition was an estimated £7.3 billion a year. Importantly, undernutrition is associated with adverse outcomes including higher mortality rates, particularly for people who are older and have a low baseline weight. Malnourished people have more hospital admissions and re-admissions, with higher complication rates and longer lengths of stay.

Markers of undernutrition are loss of weight and low baseline body weight. Brief screening tools should be used on entry to health and social care settings to identify those at risk. A careful history and examination may detect underlying illness, but 25% may have no clear cause even after investigation. Medication review and dietary assessment is indicated, and increasing oral intake is important.

Protein energy supplements may be helpful where target weight gain is not achieved or weight loss is substantial, but evidence for the reduction of mortality is limited to

undernourished patients, and there is no evidence for improvements in function or length of stay. There is currently little evidence for the use of appetite stimulants or anabolic agents.

Undernutrition in older people remains a major issue, as evidenced by the recent Age UK publication *Still hungry to be heard*.

Further reading

- Alibhai SM, Greenwood C, Payette H. An approach to the management of unintentional weight loss in elderly people. *CMAJ* 2005; 172:773–80.
- Milne AC, Potter J, Vivanti A et al. Protein and energy supplementation in elderly people at risk from malnutrition. *Cochrane Database Syst Rev* 2009; 2:CD003288.
- Age UK. *Still hungry to be heard*. London: Age UK; 2010. Available from: <http://www.ageuk.org.uk/htb>

OBESITY IN OLDER PEOPLE: A GROWING EPIDEMIC?

Professor Mike Lean, Professor of Human Nutrition, University of Glasgow

Our population is ageing, and obesity is increasing in the elderly, bringing massive and rapidly changing burdens of ill health related to increased body weights and body fat, as well as independently by its main drivers, high-fat diet and inactivity. Obesity commonly conceals a loss of muscle mass and functional capacity in older people, aggravated by inactivity. Recent evidence from the Scottish Health Survey has shown that the body mass index (BMI) increases little above the age of 60. However, waist circumferences are increasing more rapidly and continue to increase up to the age of 70.

A large number of clinical consequences of overweight and obesity are particularly problematic for elderly patients, including type 2 diabetes mellitus (T2DM), arthritis, urinary incontinence and depression. Type 2DM affects 20% of people with a BMI >30 at age 70–79. At the age of 65 the likelihood of developing T2DM is 25% at BMI 30–35 and 35% at BMI >35. All the medical consequences of obesity are multifactorial, but all are alleviated by modest, achievable weight loss (5–10 kg) with an evidence-based maintenance strategy. Reduction in poly-pharmacy is a valuable target for weight management. Age is not an obstacle to any weight management intervention, although risks from bariatric surgery may outweigh benefits in older people.

Further reading

- Corbett J, Given L, Gray L et al. *Scottish Health Survey 2008*. Edinburgh: Scottish Government; 2009. Available from: <http://www.scotland.gov.uk/Publications/2009/09/28102003/0>
- Narayan KM, Boyle JP, Thompson TJ et al. Effect of BMI on lifetime risk of diabetes in the US. *Diab Care* 2007; 30:1562–6.

ACHIEVING BETTER OUTCOMES AFTER ACUTE AND ELECTIVE GENERAL SURGERY IN OLDER PEOPLE

The anaesthetist's perspective

Dr Irwin Foo, Consultant Anaesthetist, Western General Hospital, Edinburgh

The recognition that older patients undergoing surgery have specific needs compared with their younger counterparts has allowed better management of their peri-operative course.¹ Four areas in their care have led to better outcomes and these will be explored further.

Accurate assessments of functional reserve have allowed pre-operative optimisation of this patient group. Dynamic tests such as cardiopulmonary exercise testing give a more accurate picture of their ability to cope with the stress of surgery and allow for appropriate post-operative placement. Pre-operative optimisation includes fluid and inotropic support, decisions to either start drug therapies such as beta blockers or omit medications which may interact with anaesthetic agents/techniques and the involvement of other specialties to improve patient condition.

The optimum anaesthetic technique is individually tailored to the patient. Both general anaesthetic and regional techniques are used with the aim of minimising physiological and pharmacological trespass. The newer intra-operative monitoring techniques such as the oesophageal doppler monitor facilitates fluid/inotropic optimisation and awareness monitors (e.g. the bispectral index monitor) allow accurate anaesthetic drug dosages to be given.

Post-operative placement is determined by the extent of surgical insult and the patient's functional reserve. Many will require intensive care where failing organs are supported. Chronological age is not a bar to intensive care admission, but the number of organ/system failures will determine eventual outcome. Although the survival rate in the intensive care unit is lower compared with younger patients, when they do survive, their quality of life is as good.²

Post-operative complications are linked to an increase in mortality.³ Anaesthetic techniques may help to modify this risk. Furthermore, anaesthetists may have a role in reducing delayed discharges in emergency patients by an early identification of patients requiring medicine of the elderly input.

References

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- 2 Merlani P, Chenaud C, Mariotti N et al. Long-term outcome of elderly patients requiring intensive care admission for abdominal pathologies: survival and quality of life. *Acta Anaesthesiol Scand* 2007; 51:530–7.

- 3 Khuri SF, Henderson WG, DePalma RG et al. Determinants of long-term survival after major surgery and the adverse effect of postoperative complications. *Ann Surg* 2005; 242:326–41.

The surgeon's perspective

Mr Mark Potter, Consultant Colorectal Surgeon, Western General Hospital, Edinburgh

The proportion of the population over the age of 80 continues to increase. As the population ages the diseases they experience shift towards acquired and degenerative diseases. These conditions often have a surgical treatment. Elderly patients therefore account for a growing proportion of surgical practice.

Surgery in the elderly is usually technically possible. Whether it should be undertaken or not is the difficult decision. In uncomplicated cases, the morbidity and mortality rates are comparable with younger surgical patients. However, elderly patients tend to have increasing co-morbidities. It is the number and severity of these co-morbidities that influence patient survival rather than age per se. Emergency surgery has an increased risk of morbidity and mortality. The elderly are more likely to present as an emergency, exposing them to these additional risks.

Old age can also influence the decision to operate and the choice of operation in other ways unique to the elderly population. Often these are social and practical problems. Advances in surgical technique, pre-operative evaluation and post-operative care mean that operations can be offered to increasingly frail patients, including the elderly. This talk aims to identify how these advances can be used to improve surgical outcomes in the elderly.

The geriatrician's perspective

Dr Jugdeep Dhesi, Consultant Geriatrician, Guys and St Thomas's NHS Foundation Trust, London

With changes in demographics, surgical and anaesthetic techniques and in patient expectations, increasing numbers of older people are undergoing emergency and elective surgery. Although it is well established that this group has much to gain in terms of morbidity and mortality, it is also recognised that older people remain more likely to 'fail the pre-assessment' (not have surgery) than younger people. Furthermore those who do have surgery have higher rates of post-operative complications.

From a geriatrician's perspective, opportunities to improve outcomes after general surgery are being missed. Firstly, at the pre-assessment stage, the prevalent model is for the patient to be assessed by a surgical nurse or doctor, with no specific expertise in optimising the patient. This occurs despite the wealth of evidence demonstrating improved outcomes if co-morbidities

(such as anaemia, cardiac disease, respiratory disease, diabetes and so on) are appropriately assessed and treated.

Secondly, at the peri-operative stage, the anaesthetist sees the patient on the day of surgery, with limited information from the pre-assessment clinic, and is less likely to adjust peri-operative care accordingly; for example, minor fluctuations in blood pressure which may be critical in patients with undetected dementia.

Thirdly, at the post-operative stage, medical care is provided by junior surgical staff, with advice from on-call teams, lacking in expertise in the management of older people with multiple co-morbidities.

Proactive care of older people undergoing surgery (POPS) provides an alternative model, with an elderly care team involved throughout the surgical journey. In this talk I will expand on this model and describe some of the interventions and benefits.