1 Why is geriatric medicine different?

Figure 1.1 Interaction of aging, environment and disease

Aging  
Acute illness  
Social vulnerability  
Chronic disease

Figure 1.2 Non-specific presentations

- Fall
- Confusion
- Social admission
- Weight loss
- Chest pain or other usually specific symptom
- Geriatric syndromes (the Geriatric Giants [Figure 1.3])

Figure 1.3 The Geriatric Giants

- Intellectual impairment
- Inanition
- Incontinence
- Instability
- Immobility
- Blood pressure regulation
- Temperature control
- Electrolyte regulation

- Dementia
- Sensory loss
- Cerebrovascular disease
- Chronic lung disease
- Osteoporosis
- Depression
- Osteoarthritis
- Cardiovascular disease
- Renal disease
- Diabetes
- Poverty
- Poor housing
- Social isolation

What is geriatric medicine?
Geriatric medicine is the subspecialty of general internal medicine focusing on healthcare of older people. In reality, though, the referral criteria for geriatric medicine have little to do with chronological age. Rather, geriatricians, and the multidisciplinary teams they work with, have expertise in frailty, multi-morbidity (multiple coexistent conditions) and syndromes common in later life. A distinction might be drawn between patients who are ‘chronologically old’ and those who are ‘physiologically old’ – the latter being much more likely to benefit from geriatric medical care.

Why is geriatric medicine different?
During the 20th century, improvements in public health, medicine and nutrition have led to people living longer. This is a great achievement for the human species and should be celebrated. A consequence, though, is increased prevalence of frailty, disability and long-term conditions.

Healthcare, as taught and delivered in the 20th and early 21st century, tended to focus upon a model, based around single-organ or single-system specialties, where investigation and management were conducted in the search for a single unifying diagnosis. This works less well for frail older people due to the interaction of aging, environment and chronic disease (Figure 1.1). The challenges when dealing with older adults with frailty include:

- multiple diagnoses: some long-term, some acute
- presentations with non-specific symptoms and signs
- the complexity of history taking and physical examination
- increased prevalence of mental, functional and social issues
- polypharmacy
- increased vulnerability to, and poor recovery from, stressor events
- complex ethical considerations shaped by considerations of autonomy and balancing beneficence against non-maleficence
- high prevalence of cognitive dysfunction.

Non-specific presentations
Many older adults attend with non-specific presentations (Figure 1.2). These challenge classic diagnostic models because the underlying pathology is not immediately obvious. This necessitates a more thorough and methodical approach to information gathering through history, examination and investigation.

Logical approach to clinical assessment
The structure for assessment of a frail older person is the same as for any other patient:

- history
- examination
- problem list (differential diagnosis)
- management plan.

The devil, though, is in the detail. Comprehensive history taking and examination should allow the development of a problem list, around which an individualized management plan can be developed.

History taking in older frail adults
This can be time consuming as patients are likely to have:

- multiple symptoms
- multiple co-morbidities
- polypharmacy
- sensory impairment
- cognitive impairment
- social and environmental considerations which impact upon their health

Careful history-taking is therefore essential. Collateral information can be useful where patients have cognitive impairment or limited insight into their impairments. Consider how collateral history might be gained (patient medical records, family members, community teams including carers, care home staff, paramedic records, A&E records, GPs) and document the information gained clearly. The basic format of history taking in an older person with frailty is the same as for any adult. Systems review needs to be much more detailed in view of the non-specific modes of presentation. When considering past medical history, elicit the evidence behind the diagnosis – given the difficulty of establishing a diagnosis in this cohort, it is always worth casting a critical eye over previously stated certainties. Careful documentation of drug history is essential due to the prevalence of polypharmacy with the potential for side-effects (Chapter 13). Family history is often less important from the perspective of heredity, but it is important to understand social support structures and this will include knowing which family members are available and whether they have significant problems that may interfere with caring duties or require the patient to provide care for them. Social history is vital to understanding formal care arrangements, functional ability, living circumstances and the impact of the illness on the person.

Physical examination in older frail adults
This also needs to be more detailed and comprehensive than in younger patients. Each of the individual system routines should be followed. In non-specific presentations, detailed general examination is required so as to not miss causative problems. In addition to the system examination routines, please consider the following:

- cognitive assessment (Chapter 11)
- nutritional assessment (Chapter 26)
- sensory assessment (e.g. visual acuity, otoscopy)
- musculoskeletal and gait assessment (Chapter 16)
- pressure area inspection (Chapter 27)
- digital rectal examination
- postural blood pressure measurement.

Problem lists
These allow greater lateral thinking and linking of symptoms and signs to diagnoses. A dynamic problem list has items added or deleted as appropriate and prioritization of the list can change over time. Abnormal test results, emergent functional limitations, discharge complications and response to medications can be noted. Each problem should be accompanied by a management plan with clearly defined goals – which should have a temporal and functional component. This is part of the process of Comprehensive Geriatric Assessment (CGA) – see Chapter 6.