In medical practice the elderly form a heterogeneous group so that those aged between 65 and 75 years are generally fit and active while those over 75 years (the very elderly) are more likely to suffer multiple diseases, which present atypically and lead to progressive disability and dependence. This book is concerned mainly with the neurology of the very elderly in whom common neurological disorders often present in a non-specific way and in whom the signs and symptoms of neurological disease may be difficult to elicit or assess. Clinical findings which may be caused by neurological disease may also be due to other conditions, the patient thus requiring detailed assessment in order to make a definitive diagnosis. In patients over 75 years of age neurological disease commonly co-exists with other conditions which may modify symptoms and signs: for example the presenting disease may be a stroke, but the patient may also have arthritis and dementia, both of which may alter the patient’s response to and recovery from the stroke. It must also be remembered that the subsequent complication rate from all medical conditions is much higher in the very elderly than in younger people.

In geriatric practice atypical or non-specific presentation of common conditions is the norm. These presentations include falls, immobility, incontinence, confusion, acute “acopia” (relatives or other carers being unable to cope) and hypothermia, the last often being secondary to other illnesses which may be occult. The aged patient’s clinical state may be compounded by iatrogenic illness due to multiple therapy for multiple diseases and to alterations in pharmacokinetics (what the body does to drugs in relation to their absorption, distribution and excretion) and pharmacodynamics (what drugs do to the body). It is in this context that the neurological examination of the elderly must be considered.

Much of what applies to the examination of younger individuals applies equally to the elderly, but multiple diseases and non-specific presentation may create particular problems. A full history and physical examination is even more essential than in the young but it is not proposed to discuss these aspects in detail in this book. This chapter will concentrate on the particular difficulties and pitfalls in history-taking and examination of the elderly, including factors...
related to the functional assessment of the patient and the initial planning of rehabilitation. The majority of the very elderly are women and the feminine gender is therefore used throughout unless points specific to male patients are being discussed.

**History-taking**

History-taking can be a prolonged process. The patient should be as comfortable as possible and distractions reduced to a minimum. She must be able to see the interviewer’s face so the room should be well lit: this is particularly important if she is deaf, so that she is able to lip-read. Observation of the patient during spontaneous activity is of special importance in assessing the neurological state and often provides more information than a prolonged neurological examination.

It is equally important to listen carefully to what the patient says; it is often a chance remark that gives the clue as to what is going on.

**Case 1.1**

An 80-year-old male reported having “funny turns”, during which he became at first faint and shortly afterwards unconscious for a period varying from a few seconds up to 20 minutes. The attacks, occurring three or four times a week, were always preceded by a few seconds of palpitations in the chest, and an initial diagnosis of a cardiac dysrhythmia was made. By chance the patient remarked that on several occasions he had looked at his chest at the onset of these attacks and had observed that he could “even see my chest wall twitching, the palpitations were so strong”; he had drawn his wife’s attention to this phenomenon. His wife confirmed the observation, and added that the twitching seemed to spread from his chest upwards into the left side of his neck and left arm and afterwards down into the left leg. Eventually his whole body was involved in what now was clearly a Jacksonian fit and he would be incontinent. A 24-h ECG suggested that the fits were precipitated by a supraventricular tachycardia resulting in decreased cerebral perfusion. At first treatment with verapamil controlled both the tachycardia and the fits, but when, 2 years later, the “funny turns” recurred in the absence of any tachycardia, the patient’s previous chance comment about his twitching chest and the resulting description by his wife of a Jacksonian fit, led to his successful treatment with phenytoin.

Slowness of verbal response to questions should not necessarily be taken as evidence of mental impairment; the elderly usually answer questions more slowly than the young and it is, therefore, essential to take time in history-taking. Depression, myxoedema and Parkinson’s disease may also be responsible for a slow response. High-tone deafness is common in old age and the interviewer should speak to the patient in a low-pitched voice; failure to appreciate that she may be deaf can lead to an incorrect diagnosis of dementia.