Medicine in Old Age

Non-Specific Presentation of Illness

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Presentation of illness in the elderly is often misleadingly different from that in younger age groups, and in particular, it may be entirely non-specific. Some differences may reflect the altered responses of the elderly in mechanisms such as the production of fever or pain. For example, myocardial infarction occurs quite commonly in the elderly but is usually not accompanied by typical transverse chest pain and shock. Often pain is totally absent and the patient presents with an episode of collapse, confusion, or breathlessness. Similarly in the old, lobar pneumonia—instead of having its presence indicated by cough, fever, and leucocytosis, as in the young—may present insidiously with confusion, drowsiness, unsteadiness, and slight breathlessness. These vague patterns of illness are common in the elderly and this article will consider some of the more frequent presenting syndromes.

"Failure to Thrive"

Illness quite often presents as an insidious and progressive physical deterioration, for which the paediatric term "failure to thrive" is appropriate. Typically the patient's decline comprises deteriorating social competence, weight loss, loss of appetite, increasing frailty, and diminishing initiative, concentration, and drive. This general failure of the old person is all too often accepted as due to "old age" or senility or is regarded as a dementing process and the physical basis is overlooked. There are many diagnostic possibilities.

MALIGNANT DISEASE

Malignant disease in the old quite often presents in this way. The common primary sites are lung, breast, prostate, colon, and rectum. A chest *x*-ray film and rectal examination, and examination of the breasts in women, are therefore essential parts of the assessment of the elderly patient with an unexplained general deterioration. Diagnosis may lead to useful therapy: stilboestrol treatment is often helpful in cancer of the breast or prostate even when there is wide metastasis while resection may be advisable for colorectal growths.

ENDOCRINE AND METABOLIC DISORDERS

Endocrine and metabolic disorders also need to be considered. Thyroid disease is particularly difficult to recognize clinically in the old. Perhaps half of cases of hypothyroidism do not show a classical myxoedematous picture but present with apathy, depression, mental, and physical slowing or entirely non-specific deterioration.[1] Hyperthyroidism rarely presents a classical clinical picture in the elderly and has a fairly high incidence in ill old people.[1] It may present as "apathetic thyrotoxicosis,"[2] with physical lethargy and mental depression or with general debility, perhaps accompanied by cardiac failure and sometimes auricular fibrillation but with none of the other usual stigmata of thyrotoxicosis. In view of the fairly high prevalence, difficulty of clinical recognition, and the treatable nature of thyroid disease, there is a strong case for performing thyroid function tests routinely in ill old people. On the other hand, a single result of estimating the protein-bound iodine, T-3 uptake, or T-4 level may be misleading because of the common occurrence of reduced thyroxine-binding globulin in ill old people, so that both the protein-bound iodine level (or T-4) and T-3 uptake need to be determined.[3]

Diabetes is another common disease and may also produce failure to thrive rather than present classically. It is easily missed, as glycosuria may not occur owing to high renal threshold; a random blood sugar measurement is a far more reliable screening test.[4] Uraemia is a further diagnostic possibility and is most often due to chronic pyelonephritis.

In old people who fail to thrive there is thus considerable value in doing laboratory screening tests, and these would most usefully include: measurements of the levels of blood urea, electrolytes, glucose, haemoglobin, T-3, and protein-bound iodine or T-4.

C.N.S. DISEASES

Diseases of the central nervous system may also present unobtrusively. Parkinsonism is often overlooked, being common in old age but missed because tremor is either absent or slight and the typical rigidity may not be noticed. Doctors need to look actively for the disease as L-dopa therapy can so often make a worthwhile contribution. Multiple minor strokes and the development of a pseudobulbar syndrome are less likely to be overlooked but ignoring peripheral neuropathy is an occasional pitfall; malignant disease or diabetes is the commonest cause of this condition.

DEPRESSION

Depression is another possibility that is very commonly overlooked, both in general practice and in hospital. Depression is common in old age but may often present an atypical picture, masquerading as physical disease or as failure to thrive. The possibility of depression must always be kept in mind by doctors dealing with the elderly. Inquiry about the cardinal symptoms of depression—early waking and anorexia—may often reveal the diagnosis, further questioning of the seemingly cheerful old person uncovering gross depressive or suicidal

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ideas. Treatment of depression in the old is usually with one of the tricyclic antidepressants and the results are often gratifying.

CHRONIC INFECTIONS

Chronic infections are a somewhat unusual cause of insidious decline but, though uncommon, pulmonary tuberculosis—particularly in the elderly man—and subacute bacterial endocarditis must be remembered as possibilities because of their seriousness and treatment potentiality.

IATROGENIC ILLNESS

Iatrogenic illness should always be considered. The elderly are particularly vulnerable to the adverse effects of drugs,[5] and examples in the context of failure to thrive include oversedation from night sedatives (especially barbiturates), antiepileptic drugs or tranquillizers, depression from reserpine-containing drugs, drug-induced Parkinsonism from phenothiazines, and weakness due to hypokalaemia following diuretic therapy with inadequate potassium supplementation.

Falls and Blackouts

This is another important presentation of illness in the elderly and because of accompanying trauma or fracture often leads to hospital admission. Patients with Parkinsonism are particularly prone to repeated falls, while those with unstable knees from osteoarthritis are also particularly vulnerable. Patients with rheumatoid arthritis affecting the cervical spine may have falls owing to vertebrobasilar insufficiency which occurs on moving the neck. So-called "premonitory falls" may herald acute physical illness such as pneumonia.

The side effects of drugs also need to be considered in the list of causes. Hypotensive drugs are commonly to blame for falls and blackouts, and all too often these have been prescribed on flimsy grounds, the patient not having true sustained hypertension. Here the mechanism is that of postural hypotension and this may also result from over-enthusiastic diuretic therapy that has lowered the serum sodium level. Over-sedation with barbiturates or phenothiazine tranquillizers may also result in falls.

Mental Deterioration

Very commonly, physical illness may present as mental disturbance in the elderly patient, and it is important that such mental symptoms are not mistakenly ascribed to dementia or "senility." The possibility of a physical cause for mental symptoms most obviously needs to be considered when these are of recent onset.

ACUTE CONFUSIONAL STATES

These may be due to a wide variety of diseases,[6] but most important among these are lobar pneumonia, bronchopneumonia, urinary infection, cardiac failure, and left ventricular failure. Though confusional states may readily occur in patients whose previous mental state was completely normal, pre-existing dementia and Parkinsonism both appear to facilitate their development.[6] Drug therapy may also result in confusional states. Barbiturates, tricyclic antidepressants, and anti-Parkinsonian drugs are specially noteworthy. Among the anti-Parkinsonian drugs, the atropine-like drugs such as benzhexol and orphenadrine are often implicated, but amantidine may give confusional states remarkable for the intensive visual hallucinations which may accompany them.

Subacute and chronic confusional states are particularly likely to be confused with dementia and here such causes as uraemia, carcinomatosis, pernicious anaemia, or hypothyroidism need to be considered.

Organic brain disease may also result in true dementia. In some instances an accurate diagnosis—for example, that of cerebral arteriosclerosis or a cerebral tumour—may not lead to any therapeutic opportunities, but the diagnosis of rarer diseases such as subdural haematoma, low pressure hydrocephalus,[7] or general paresis is important as these are potentially reversible.

"Rheumatism"

Poorly localized skeletal or muscular aches and pains are so common in old age because of the high incidence of degenerative joint disease that "rheumatic" pains heralding treatable or serious disease may unwisely be ignored. Osteomalacia is an important example as it is far from rare, eminently treatable, but easily overlooked. It affects particularly the housebound, those with previous gastric surgery, and women as opposed to men.[8] The patient becomes progressively more disabled, with "rheumatic" pains and proximal muscle weakness as the key symptoms. They may develop a typical waddling "penguin" gait and have special difficulty in getting up from a chair because of the muscle weakness.

Another important cause of "rheumatic" pain is the presence of metastases in bone. These occur most commonly from carcinoma of breast or prostate and may respond well for a time to treatment with stilboestrol. Multiple myeloma deposits are another possibility. The recent development of low back pain in an elderly person is not rarely due to these conditions, whereas prolapse of the intervertebral disc is practically never the explanation and simple osteoporotic collapse uncommonly so.

Immobility

An old person "going off his feet" is a common reason for admission to a geriatric department. Again, all too frequently this is assumed to be simply due to old age and the physical basis overlooked. Central nervous system disease—especially strokes or Parkinsonism—and locomotor disease such as osteoarthritis, rheumatoid arthritis, or osteomalacia are major causes. It is not rare for fracture to have been missed as the cause for immobility in patients who have had many falls. Immobility may also develop because of general frailty in the context of failure to thrive or may be due to loss of confidence due to frequent falls or unsteadiness—for example, from laterally unstable knees in severe osteoarthritis, postural hypotension, or over-sedation.

Incontinence

Incontinence too should not automatically be accepted as due to old age or mental deterioration. Immobility itself may cause incontinence and other major factors are urinary infection; urinary retention with overflow; stress incontinence in old women who have had children; faecal impaction giving either urinary retention or spurious diarrhoea and faecal incontinence; and incontinence associated with the urgency caused by diuretic therapy. Night sedation may be responsible for incontinence during the night.

Conclusion

All these examples show that presentation is often misleading or obscure in elderly patients—a factor which calls for special vigilance in dealing with the elderly. Unless full use is made of good history taking (particularly with regard to drug therapy) physical examination, and relevant investigations, many errors will be made. The non-specific presentation of illness in the old

must be regarded as a diagnostic challenge. If this attitude is adopted, medical work with the elderly becomes a fascinating, exacting, and rewarding discipline. Only by proper diagnosis can the elderly be helped to the full. If their symptoms are dismissed and "old age," "senility," "rheumatism," or some other conveniently vague label is applied, many opportunities for effective treatment of old patients will be missed, at the cost of much unnecessary suffering and disability.

References

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Contemporary Themes

Non-Accidental Injury to Children

On 9 October a report was published by the Tunbridge Wells Study Group entitled *Non-Accidental Injuries to Children*. This was an ad hoc group set up by Dr. A. White Franklin and Dr. Christine Cooper, arising out of an initial meeting of a working party at Tunbridge Wells in May this year. Its invited members represented most of the professional bodies concerned with the problem—namely medical men, social workers, lawyers, and members of the police. Each prepared a paper for circulation before the meeting, which was held at the Hospital for Sick Children, London, on 22 June, 1973. The document points out that "not every participant agrees with every detail and no participant could commit the body which he represented or of which he was a member. Nevertheless the greatest care has been taken to achieve wording most of which satisfies most of those who took part."

The report was sent to the Department of Health and Social Security, which has decided to send a copy to every doctor. The following is a summary of the resolutions that were passed, which the report says, with the exceptions of resolutions N and O, are "concerned with techniques for ensuring the maximum of support for families caught up in the problems of non-accidental injury to their children, so as to limit the harm done both physically and emotionally. They are concerned with prevention only in relation to repetition of the injury and to countering the effects of deprivation. This does not mean that the Study Group fails to recognize the supreme importance of prevention, which it is hoped will form the subject of a further meeting (see Resolution 2)."

Resolutions

(A) "That for children damaged by non-accidental injury or when this is suspected, immediate hospital admission of the child is the essential first step."

(B) "That close links should always be established between the hospital children's department and the accident and emergency department."

(C) "That health visitors should be informed directly of all young children involved in accidents, including poisoning (particularly those under the age of 2 years), so that they may visit the home. The general practitioner should always be informed."

(D) "That the social service department should be informed immediately whenever there is suspicion of non-accidental injury."

(E) That when non-accidental injury is suspected or known to have occurred, the N.S.P.C.C. or other voluntary society, when already concerned, should continue to be involved in management and included in all professional discussions.

(F) "That the police should be involved in the early discussion of these cases even when there is only a suspicion of non-accidental injury. The Study Group is aware that at present this involvement is often inhibited by fear of the effects on the family of some police investigations and therefore agrees that approaches be made to the Home Office, and Department of Health and Social Security and the Association of Chief Police Officers to explore the ways of promoting increasing mutual understanding between the police and the other professions concerned.

(G) "That representatives in the Study Group of each of the parties likely to be involved with a family, while reserving their professional rights, strongly deprecates unilateral action. When such action seems necessary, all the other parties involved expect to know what action is being taken and the reasons for it so that mutual trust and confidence can be preserved."

(H) "That the Study Group strongly supports the establishment throughout the United Kingdom of the case conferences and the area review committees as suggested by the D.H.S.S. (ref. Chief Medical Officer's letter with enclosure "analysis" of reports submitted by medical officers of health and children's officers) but recommends that the functions of these bodies be more clearly stated and that their composition be modified."

(I) "That review committees should be set up at area health authority and local authority level and should hold quarterly meetings. That case conferences should supervise the management of families involved and that review committees and case conferences should have the functions and the composition set out in detail in paragraphs 24 and 14 and 15 respectively."*

*The functions of the area committee recommended in paragraph 24 are: to act as a forum where the widest possible consultation can be held between all professions who play any part in managing the problem; to take responsibility for formulating policy and procedures; to review the work of the case conferences in its area; to ensure that long-term plans, whether with the child at home or placed either in a home or with foster parents, is being satisfactorily carried out; to promote the spread of knowledge; to encourage research; to co-operate in epidemiological studies; to be in touch with review committees in adjacent areas; and to submit an annual report to the D.H.S.S. and the Home Office.

The function of the case conference, the report says in paragraph 14, is "to bring together all those who can provide information about the family, those who make decisions and those who provide services. Responsibility for co-ordinating the details of treatment has to be delegated to one person, but it is necessary for the case conference to retain an overall responsibility for each step that is taken. This responsibility continues at least until after the child has returned to the care of his own family at home and therefore even if no actual meeting is convened, every member must be informed when the child leaves hospital wherever he is sent, and, very importantly, when the child returns home. No child under suspicion should leave hospital without the agreement of the social services."

Paragraph 15 deals with the suggested composition of the case conference, the named members providing, the report says, the minimum requirements: the senior paediatrician with members of his staff, the psychiatrist, the ward sister or the senior nurse concerned with the child, the senior member of the social service staff concerned with the child, the health visitor and the representative of any voluntary social agency such as the N.S.P.C.C. who may have been already involved. The family's general practitioner should be invited to attend. With regard to the police, a superintendent or chief superintendent, either of whom are able to make decisions, should be given the opportunity to attend. The police can then use their discretion about the need to attend and will no doubt be influenced by the seriousness of the situation and the degree of suspicion.