THE ELDERLY AND THEIR DISABILITIES*

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The physical and intellectual deteriorations of the elderly do not arise suddenly. Except for accidents they develop slowly and insidiously. At first they are either asymptomatic or pass unobserved, but after a varying period vague evanescent symptoms, not readily susceptible to objective scrutiny, persist in recurring. These symptoms often cause greater discomfort than more recognizable pathology, and constitute the warning signs of the development of serious deterioration. Energetic investigation may prove rewarding. The next stage — the stage of identifiable pathological signs — is reached much later; by that time the disease may be irreversible.

Accordingly, disorders of later life are of three types. Only a few examples of each type are given.

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1. VAGUE SUBJECTIVE SYMPTOMS

Vague symptoms or complaints, mainly of a subjective nature and lacking objective evidence of their validity or severity, form this group. Separately, each of these symptoms appears trivial and not entitled to special attention; nevertheless, when associated with other similarly insignificant affections, they are capable of destroying the sufferer's equanimity, sapping his courage and strength, and converting him into a disgruntled, querulous and asocial dotard. Of almost universal appearance among the elderly is a vague feeling of tiredness, lassitude, malaise, unreasonable anxiety, unaccountable irritability, and often insomnia.

The fact that these symptoms are commonplace and have at the same time an elusive pathogenesis, is responsible for the irritability, impatience and apparent callousness of some doctors when dealing with the elderly. However, these doctors often salve their consciences and dull their diagnostic acumen by persuading themselves that these patients are psychoneurotics or are undergoing the inevitable discomforts of ageing. Nevertheless, diligent search not infrequently shows that the causative factors are remediable or tangible, e.g. a low-grade chronic infection, a minor metabolic dysfunction, mild hypothyroidism or a more serious disease.

Mr. A's case supports this contention. At 74 years of age, his only complaint was feeling tired on waking, even after a fair night's sleep. Questioning elicited the fact that the tiredness diminished as the day progressed and that he seldom perspired. Examination showed an apparently healthy, placid, well-covered elderly man, looking younger than his years, with a normal cardiovascular system, a dry skin and brittle nails. On the assumption that he was hypothyroidic he was given 2 gr. of dry thyroid a day, and within a week he reported improvement. One is not always so fortunate, because in the old even minor ailments often have multiple causes.

Constipation

This results from a variety of aetiologic factors and is one of the most frequent complaints of ageing persons. It is more common in women than men, and its frequency increases with age.

Doctors and patients disagree radically about its definition and importance. Most elderly persons rank it as a definite disease entity, and attribute to it numerous discomforts, including sluggishness, drowsiness, headache, halitosis and abdominal distention. Doctors realize that constipation is only a symptom, but usually err in considering it unworthy of investigation, in spite of their experience that it is the alibi concealing, at best, overindulgence in 'opening medicines' and, at worst, a neoplasm of the colon, and that it is associated with the heinous condition of impacted faeces.

Doctors also err in hoping that reassuring the patient that the discomforts of constipation are psychological only will cure him of its ills. To the patient the miseries are real and nothing short of a thorough investigation including rectal examination, simple instructions, and a suitable aperient, will give a satisfactory guide to proper treatment. Of 200 persons over 65, 64% of the females and 33% of the males complained of constipation, but the definition of constipation varies from person to person.

Memory

Memory, especially for recent events, deteriorates with age, and constitutes a source of annoyance and worry. Unlike auditory or visual defects, the sufferer recognizes it early, and is in eager search of a remedy. In the absence of a definite pathology some improvement results from attendance to general health, adequate diet, rest and sleep, reduction of alcohol, barbiturates and other sedatives, and the discreet use of a pocket notebook.

Of 200 consecutive persons apparently aged over 65, who were asked whether their memory was as good now as it had been 5 years ago, 84% replied 'No', 14% replied 'Yes', and 2% replied 'Better'; none were doubtful — a significant fact.

Insomnia

It is assumed that the duration and depth of sleep required varies from person to person; nevertheless, elderly people are seldom content with the length of their sleep, an assessment with which nurses and doctors usually disagree. The adequacy of sleep is not susceptible to objective determination, and therefore the patient himself remains the most reliable judge. A person deprived of sleep soon develops psychiatric or neurologic symptoms; to a lesser extent the same may happen to insomniacs. Bad sleepers blame insomnia for their weakness, irritability and mental torpidity; mild hypnotics therefore do less harm than insomnia, real or imaginary — it is the choice of the lesser evil. One hundred elderly persons were asked whether they slept well. Of these, 12 stated that they slept badly and were receiving hypnotics from their doctors nightly; 20 were taking barbiturates or other sleeping tablets from 3 times a week to once a month, some with, some without the knowledge of their doctors; 13 stated they did not sleep as well as they used to, but realized they required less sleep than younger persons, and were satisfied; while 8 claimed they slept as well as before. The rest stated that their sleep varied or gave indefinite replies.

2. OBJECTIVE DETERIORATION

Because of their very frequent association with old age, objectively verifiable and measurable deteriorations of certain organs are often regarded as normal at this period of life.

Hearing

An outstanding example is *decline in auditory acuity* which increases with age. In spite of its prevalence, elderly individuals appear to be unaware of it or unconcerned until it is well advanced. Moreover, few are ready to admit their hearing is failing and prefer to impute their auditory difficulties to the laziness of younger people to pronounce their consonants clearly.

After being persuaded that the fault lies with them, they persist in fighting against a hearing aid as if it is more disfiguring and stigmatizing or more uncomfortable than spectacles. Their stubbornness, however, is not entirely unreasonable, for the modern hearing aid is not yet a satisfactory instrument in the ears of some old persons; for a number of them the old-fashioned ear-trumpet still

appears to be the most effective hearing aid. Much benefit could accrue if otologists, acoustic experts, and instrument makers were to pool more of their ingenuity. The dread of becoming totally deaf often haunts sufferers after realizing their hearing is failing. Reassurance that total deafness is a rather rare contingency in old people brings about much relief.

Sheldon rated loss of hearing acuity as a disability next in importance to weakness of vision.[1] One is tempted to reverse the order, for though more persons suffer from defects of vision than of hearing, no defect causes so much mental anguish, misery and a feeling of being ostracized as hardness of hearing.

Most blind persons are socially pleasant and sensible; most deaf people appear unhappy, disgruntled and suspicious. About 50% of my patients over 60 suffer from some hearing defect; it is more common among males than females, although otosclerosis and tinnitus are more prevalent among females than males.

Vision

Diminution of visual acuity is considered a concomitant of advancing years, and is therefore far too often neglected in spite of suitable spectacles being able to ameliorate most errors of lens accommodation.

Of my patients of 65 years and over, 94% suffer from some correctable visual defect. This figure is not extraordinary; in 1948 Pemberton[2] found that 97·5% of a group of old people in Sheffield needed spectacles. Sheldon[3] mentioned that in England as a whole more than 90% of old people require spectacles.

At the Cape Jewish Aged Home all but 2 of the mentally normal individuals suffering from correctable errors of refraction had suitable glasses, although they did not always use them.

3. MANIFEST PATHOLOGICAL CONDITIONS

These are conditions with manifest signs and symptoms affecting persons of all ages, but old individuals are more liable to suffer from them than younger persons, and most of them are affected by at least one of these conditions.

The information which follows is drawn mainly from the Cape Jewish Aged Home, whose residents constitute a relatively unselected group of elderly Europeans in South Africa.[4]

On 18 August 1959, a census taken at this Home showed that it housed 179 individuals (111 females and 68 males) whose ages ranged from 53 to 91, the majority (81·6%) being 70 years and over. Their case histories included 56 pathological conditions. To facilitate study, these conditions were placed in 12 groups according to the disability they produced:[4] (1) cardiovascular, (2) mental impairment, (3) metabolic, (4) nervous, (5) genito-urinary, (6) special senses, (7) rheumatic, (8) mechanical, (9) gastro-intestinal, (10) cancer, (11) respiratory, and (12) skin.

Fig. 1 sets out the incidence of these disease groups graphically, comparing their occurrence in the total population of the Home with that of the females and the males. It shows, *inter alia*, that the incidence of disease in certain organs is rather high in elderly individuals, and that there is a sex disparity in the occurrence of various types of disease.

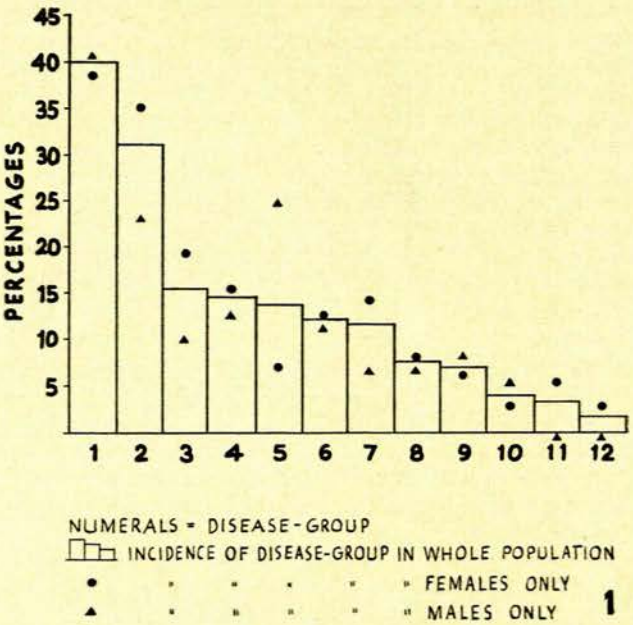

Fig. 1. A comparison of the percentage occurrence of various diseases in the total population of the Cape Jewish Aged Home and in the females and males separately. The disease groups (1 - 12) are enumerated in the text.

It would be useful now to discuss the symptomatology of certain of these diseases as they appear in the aged.

Myocardial Infarction

In the aged this condition can occur with minimal pain or discomfort, and what pain there is may divert attention to some other organ. A cardiogram should therefore be taken in all cases of inexplicable or sudden illness or collapse in elderly patients, provided it is borne in mind that a number of pathological conditions can simulate the signs and symptoms of coronary heart disease, and that the cardiograph is not infallible as a diagnostician.

Haemorrhage, especially from a lesion of the gastro-intestinal tract such as a peptic ulcer, diverticulitis, diverticulosis or neoplasm, may give rise to the general alarm reaction of Seyle which often mirrors the signs and symptoms of coronary disease.

A patient with duodenal haemorrhage was diagnosed and treated for coronary infarct because too much reliance was placed on a cardiographic reading. On the other hand the symptoms of cervical osteoarthritis mimicked cardiac infarct so well that another patient aged 68 was treated for coronary disease in spite of absent cardiographic evidence, and a history of the ineffectiveness of nitroglycerine.

Some practitioners claim successful results in treating heart disease with alpha-tocopherol (vitamin E), and others with magnesium sulphate injections. I have had no success with vitamin E, and only 1 success out of 50 with magnesium sulphate; I have also had no success with long-acting coronary vasodilators.

Congestive Cardiac Failure

Digitalis remains a most helpful drug in cardiac disease, but old people are easily injured by it. Most digitalis pre-

parations are active and potent now. Gone are the days of Herbert French when a patient came to no harm from taking an extract of the leaf uninterruptedly for several years. It is generally accepted that a patient having digitalis should have his pulse checked frequently; nevertheless, omitting to do so is not unknown.

Mr. H., aged 76, was on a maintenance dose of digitalis. A pulse rate between 35 and 40 did not prevent him from jogging along from bed to chair or bathroom, without complaint. But when he sustained a fracture, his heart was unable to take the extra stress and failed. Had his doctor seen him regularly and controlled his digitalis, things might have been different.

Ectopic rhythm is often the only sign of overdigitalization, and a rapid pulse does not exclude its possibility. *Extrasystoles* in the elderly are premonitory signs that the heart is failing to stand up to some strain.

Where digitalis fails to slow down a rapid pulse, the thyroid should be investigated, for *thyrotoxicosis* is a common cause of cardiac failure.

Mrs. L., a sufferer from rheumatic heart disease, went into cardiac failure. Usual treatment and digitalis given over many months failed to bring relief. The iodine-uptake test indicated the cause; proper treatment soon relieved the symptoms.

Cerebrovascular Accidents

Mr. B., an old neurotic, in the habit of exaggerating trifling symptoms, complained of giddiness, numbness, pins and needles, and paresis of his left hand. His doctor could find no signs of paresis or disturbed sensation and therefore dismissed the condition as neurosis and delivered a lecture on the psychology of old age, but hardly had he left, when definite signs of left-sided hemiplegia set in.

The lessons to be learnt from this case are that the patient 'cried wolf' once too often, and the doctor put too much faith in his knowledge of the patient's history and too little in his symptoms (an attitude which tricked him into ignoring the prodromal symptoms of a serious catastrophe).

The popular belief that patients with cerebrovascular accidents rarely recover sufficiently to lead an independent life is a misconception. On 18 August 1959 there were 18 residents at the Home who had had strokes; the exact pathology (thrombosis, embolus or haemorrhage), the severity, and the site of the original lesion, were not recorded. Of these patients, 3 had recovered completely without residual physical or intellectual deficits, 3 had become ambulant and relatively independent, and 12 remained helpless. No data are available of patients who may have succumbed shortly after their stroke.

Mental Impairment

Extensive cerebral arteriosclerosis or cerebral degeneration is not incompatible with normal or even high cerebral activity, while gross mental dysfunction may be exhibited in persons with minimal cerebral or arterial damage.[5] One often meets persons with pipe-stem radial and temporal arteries whose mentality is active, alert and resilient. Some scientists therefore maintain that there is no direct correlation between cerebrovascular arteriosclerosis and mental symptoms.[6] Nevertheless one learns from experience that the mental reserve of the elderly is poor; they cannot endure mental stress as well as in their younger days.[7]

The unitary concept of health which is the modern version of *mens sana in corpore sano* is generally accepted. In the aged, as in younger people, somatic and psychic health are interdependent; many somatic symptoms are the result of psychical disturbances and *vice versa*. Erratic behaviour, ranging from over-irritability or anxiety to confusion or convulsions, may be due to hypoglycaemia, resulting from an overdose of a hypoglycaemic agent, endocrine disturbance, or tumour of the pancreas. Most doctors of the early insulin vintage have had experience of the dramatic effect of intravenous glucose in a confused and sweating hypoglycaemic patient. Howell[8] described a sequence of mental symptoms associated with falling systolic blood pressure in 25 hypertensive arteriosclerotic old men; there is also a report of a group of confused patients admitted as sufferers from arteriosclerotic brain disease, who recovered on massive doses of vitamin B, but who relapsed after stopping it. It is claimed that big doses of vitamin B_{12} assist senile dementia.

Gastro-intestinal Tract

The signs and symptoms of gastro-intestinal emergencies in the young are prominent and flamboyant. In the old they are often silent and indefinite. The behaviour of acute appendicitis in the elderly is well known, but it is not so well remembered that a peptic ulcer and even its perforation may be similarly disguised.

In the young, epigastric pain related to meals and relieved by food or alkalis is almost pathognomonic of peptic ulceration. In the old this helpful symptom is often absent, as is epigastric tenderness. Perforation of a peptic ulcer in the young is a serious enough emergency, but it is of much graver import in the old. Surgical interference is not mandatory, but early diagnosis and energetic and watchful handling may be life-saving.

Many gastro-intestinal diseases, especially bleeding from the stomach and duodenum, diverticulosis and diverticulitis, polyposis and neoplasm, present great difficulty in diagnosis, hence the need for unstinting radiological investigation. There is no evidence to support the fear that such X-ray examinations accelerate the process of ageing in elderly persons.[9]

CONCLUSIONS AND SUMMARY

Vague, evanescent symptoms of the old are remediable premonitions of pathology which may later become irreversible.

The diseases of the old develop in stages; their symptomatology and therapeutics present special features and difficulties.

A survey is presented of a few disabilities of the old.

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