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SOME PRACTICAL POINTS IN GERIATRICS

BY

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DEPUTY PHYSICIAN AND SURGEON,
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PREFACE

THE observations on which this book is founded were made while acting as Deputy Physician and Surgeon at the Royal Hospital, Chelsea. Several of the chapters are based on articles written for various medical journals. In particular, it is desired to thank the Editor of the *Postgraduate Medical Journal* for permission to reprint Chapters I and X, the *British Medical Journal* for Chapter VIII, the *British Heart Journal* for Chapter IV, the *Practitioner* for Chapter VI, and the *British Journal of Physical Medicine* for Chapter V. Thanks are also due to the War Office and the Commissioners of the Royal Hospital, Chelsea, for their permission to publish this book, dealing, as it does, with Chelsea pensioners.

Although the observations made were of a purely clinical nature, it is to be hoped that one or two of them may be of some value when added to the small number of facts which make up our present knowledge of old age.

T. H. H.

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CONTENTS

OLD AGE

CHAPTER I

APPROACH TO OLD AGE

OLD age and its diseases are going to be among the most serious problems which medicine must face in the future. In 1931, nearly 10 per cent. of the population were either men over sixty-five or women over sixty years of age. The Beveridge Plan estimates that in 1971 over 20 per cent. will be included in this class. Since the aged need medical attention more often than younger persons, it is obvious that thought must be given to the approach to sickness in old age.

The first point to bear in mind when dealing with a senile patient is that the usual clinical procedures must be varied somewhat. The basic pathology of diseases common in old age is not the same as that of middle age. In the former, degeneration, chronic infections and ischæmia predominate; in the latter, cancer, hypertension and various dyspepsias make up a large part of the sum total of disease. The disorders of youth and maturity can usually be diagnosed with some precision; but with old folk, the labels of "debility," "myocardial degeneration," and so on, cover the ignorance which remains even after the most careful investigation of some cases. The history of the illness, so helpful in most patients, often sheds but little light on the present condition of an elderly person. The story may be checked by information from relatives which sometimes throws irrelevancies or exaggerations into relief. This also helps in the assessment of the patient's mental condition—a necessary part of the clinical note in all senile cases.

Certain symptoms call for special mention. Any complaint of constipation should be probed with care. Many old people are extremely bowel-conscious, and feel dissatisfied with their performance if there is only one stool a day. Sometimes they do not consider that a small motion should be counted in their tally, and claim to be constipated in spite of it. The amount of sleep is another point about which verification is advisable. Some old folk, especially when confined to bed, expect to sleep all night as

well as dozing on and off during the day. Requests for hypnotics therefore need careful consideration before being gratified. Sometimes "token-hypnotics," such as aspirin, are psychologically necessary. Two symptoms stand out as being possible danger signs in the elderly. The first of these is a complaint of pain, discomfort or "wind" in the epigastrium or lower chest. This is often due to cardio-vascular disease rather than a digestive disorder, and sometimes precedes a dramatic incident, such as a coronary thrombosis or dissecting aneurism. The second warning is a story of diarrhœa, lasting more than a few days or recurring, either true or spurious. So many neoplasms of the gut first manifest themselves in this way. Yet, on the whole, the history of the present condition is less helpful than one would wish in old people.

Clinical Examination

The ordinary routine examination of a patient over sixty needs a few changes in order to ascertain the true state of affairs. The search must be carried out with the queries of degeneration, chronic infection, ischæmia and cancer at the back of the examiner's mind. The preliminary survey needs to be searching, since much may be learnt from the manner of sitting, standing, moving, breathing and speaking. Facial contours, complexion and expression can tell the observer a great deal: skin texture, prominence or otherwise of veins and arteries, the colouring of ears, lips and extremities all give help in estimating the soil in which disease may have taken root. Comparison of the apparent age with the real one is a helpful procedure in classification of the case. This general inspection is perhaps more important than all the rest of the physical examination.

On examining the mouth, it should be remembered that the presence or absence of teeth is more vital than the presence or absence of infection. Dyspepsia is commoner in the toothless than in those whose oral state is foul. Removal of infected teeth in old people only occasionally coincides with a turn for the better. Another related point is that the possession of dentures is not always accompanied by their use. Cases have been known in which the æsthetic use was considered higher than the masticatory value.

Examination of the respiratory system in the aged is not always very informative, especially in the presence of emphysema. In

such cases, the back of the chest is more important than the front and the lung bases than their apices. Sometimes evidence of pulmonary consolidation is doubtful in an early pneumonia, so that the presence of increased frequency of pulse and respiration may be the deciding point. A temperature of 98·4° is quite compatible with consolidation in an old person. When such cases are being treated with sulphapyridine, great attention must be paid to the lung bases, as the first signs of toxæmic cardiac failure following the infection manifest themselves here. Primary carcinoma of the lung or bronchus is not usual in the senile, but should not be forgotten. The physician should not be deterred from sending any doubtful cases to be X-rayed, as this is sometimes the only form of pulmonary examination which yields positive results.

When considering the cardio-vascular system of the elderly, it is often profitable to begin peripherally with the vessels of the limbs. Having assessed the degree of arteriosclerosis in all the arteries examined, including those of the fundus oculi, and having noted the state of the veins, the blood pressure may be taken. The height of the systolic pressure, in comparison with the degree of arterial thickening present, gives more information about the case than is obtained from routine examination of the heart. Results of inspection, palpation and percussion of that organ in old people are apt to be misleading, while the presence or absence of murmurs tells nothing of the strength of the myocardium. But a systolic pressure of 130 mm. or below, associated with more than moderate arterial changes, implies a poor prognosis. Hypertension in the aged is not unusual ; it seems to be necessary to prevent ischæmia of vital structures from arteriosclerosis. Of course, to get a correct estimate of the patient's level, repeated readings are necessary. But the patient should not be given the figures, or a blood pressure complex may ensue. Those cardiac arrythmias of significance in old age are auricular fibrillation and heart block. Extra-systoles are common, but without prognostic value, while other irregularities are rare. Fluoroscopy is the best method of determining the size and shape of the heart, and should be used in all doubtful cases.

Abdominal examination of old folk is similar to that in adults. Enlargements of the liver are commoner in Chelsea pensioners than in younger patients, but this is not always the case with the aged. Examination of the rectum is perhaps more important in

the old than with others, since carcinoma there often remains silent. In fact, neoplasms of the whole digestive tract follow this rule. Therefore X-ray examination of the gut should be carried out too soon rather than too late. The presence of dilated veins on the abdominal wall is not unusual in old people. A typical " caput Medusæ " is rare, but parallel veins coursing downwards on one or both flanks are seen at times. These may occur in association with intra-abdominal tumours.

The specific gravity of the urine in old people is lower than in adult life. In a series of 120 Chelsea pensioners, only twelve (10 per cent.) had a figure above 1,025 and nine of these were seriously ill. Forty-three (36 per cent.) had figures below 1,010, most of them being fit for their age. A trace of sugar is found sometimes, but this is rarely marked, and calls for observation rather than treatment. Some old folks are sensitive to small overdosage of insulin and become comatose with little warning, especially with the protamine zinc variety.

When examining the nervous system of elderly patients, the usual procedure may be followed. As mentioned above, care should be taken to assess the level of intelligence presence. Although it has been stated that vibration sense is often diminished or absent in old age, this finding is subject to great variation. The upper limbs may register when the lower ones do not, or the findings may be normal. A phenomenon met occasionally is a case complaining of an indolent ulcer of the foot, with absent vibration sense, weak or absent knee and ankle jerks and sluggish pupils. In Chelsea pensioners, with whom a positive Wasserman reaction is not uncommon, the diagnosis of tabes dorsalis is not always correct, though tempting.

Finally, it should always be borne in mind that the careful investigation of disease in the aged is not always a waste of time. Many cases will be incurable, but there will be a definite proportion which respond to treatment in a most gratifying manner.

CHAPTER II

CARE, COMFORT AND MANAGEMENT

THE difficulties which arise in the care of old persons who are not ill, may be divided into those which originate in the relatives or attendants and those involving the patient himself. The former tend to mollycoddle their victim and to regard him as lacking in common sense. They forget that old age is not always synonymous with delicate health and stupidity. In practice it is often necessary to show that patience, cheerfulness and a simple joke at times, can help an old man or woman to lead an almost normal life until the end is quite near. Fussing, pampering or bullying only create misery for all concerned by making the old person confused and helpless earlier than need be. It is important to keep a proper perspective when considering the woes of the aged ; making light of minor complaints is better than maximising them. Anything tending to produce self-pity must be avoided, so that sympathy is to be administered sparingly. It makes a poor tonic for old folk. Also a frequent recital of complaints to the nurse or doctor is to be checked, since they gradually grow in the mind of the patient during the telling.

It is important to remember that an old person considers himself something of an authority on living by reason of reaching his present age. Experience has probably taught him a suitable routine, which should not be changed drastically if it can be avoided. Moderation and regularity are the two ideals at which to aim in the management of old people. As George Cheyne put it in 1725 : " No voluptuous or lazy person, unless he has had an original constitution of Brass, was ever a long Liver. . . . All those who have lived long and without much Pain, have lived abstemiously, poor and meagre." Many elderly folk eat more than is necessary. The resultant increase of fat is not beneficial to their health. At the same time, partly by natural disinclination and partly by mistaken advice from relatives, they diminish their usual amount of exercise. Eventually they take to their bed for good and go downhill much more quickly, both in body and mind, than those who remain active. It cannot be stressed too firmly that immobility leads to stagnation and decay of mental and physical qualities. Senescence needs contact with the outside

world and stimulation rather than suppression and sedatives. The wireless, books and newspapers help to keep men and women alert and to enliven the monotony which threatens them. Thus hobbies and occupations are to be encouraged. It is noteworthy, in the Royal Hospital, Chelsea, that the fittest veterans are the men who keep their own plot of garden and who enjoy a game of bowls. Transition from active occupation to complete retirement, without industry or interests, often spells early atrophy and death.

Some of the habits of old persons are liable to need modification, however. Such matters as fresh air, bathing, clothing and the use of alcohol may require consideration and adjustment sooner or later. The senescent should be encouraged to take fresh air and exercise daily unless the weather is very unsuitable. By doing so, he will probably find that he has lost the desire to add more and more jerseys, vests and waistcoats in an attempt to keep warm. It is usually the sedentary old man with masses of garments who complains most of "feeling the cold." The matter of alcohol needs to be considered with care. A glass or two of beer each day does not seem to have any ill-effects, even in patients with rheumatic diseases. At night an ounce of whiskey is often a useful sedative, especially in those not accustomed to the use of spirits. But heavy drinking by old men often has more immediate ill-effects than in younger persons, with more hepatic, renal and cerebral reserve. Bathing is another matter which needs consideration at times. Many old folk grow averse to having a bath as they get on in years. They should be reassured that regular bathing is good for their health, or they may become incredibly dirty. On the whole, the basic principle of a regular normal routine should be followed as nearly as possible.

Sickness

Apart from the actual treatment of disease in old persons, a great deal can be done to improve their condition by attention to their comfort when they are not well. It is very easy for an elderly person to get into an uncomfortable position and be unable to remedy matters. One of the first duties of an attendant is to change the posture of the patient from time to time, preferably with some assistance from another person. If the case becomes "chesty," transference from bed to an armchair often improves the condition by allowing better expansion of the lungs.

In all cases where it is possible, without detriment to the patient, it is advisable to have him out of bed for part of the day. The effects, both physical and psychological, are beneficial even if the change is only for a few minutes. Remaining in one position will lead to pressure and disturbance of local circulation. Bed-sores and other atrophic changes follow, probably caused by ischæmia which is the chief and classical basis of so much senile pathology.

Regulation of the patient's bowels is a point which is certain to need consideration sooner or later. Old people are not always reliable witnesses in this matter, so their statements are best confirmed. When laxatives are given, liquid paraffin or paraffin emulsion can be made the starting point. If this is not enough, a drachm of liquid extract of cascara may be added to the ounce of paraffin with benefit in most cases. When a variant is desired, one or two vegetable laxative tablets may be given. Salts are not unsuitable for the aged, given in plenty of hot water and followed by a cup of tea or coffee. Mist. Senna Co. is another useful preparation which is more efficacious when followed by a hot drink. As far as possible, the stronger purgatives should be avoided. When the drugs enumerated have failed, it is better to give a simple enema. Sometimes it takes a little while to find which laxative is most suited to a patient and some loose stools may be produced. In such cases, and for transient diarrhœa, it is convenient to use a mixture of three parts of Pulv. Creta Arom. cum Opio with five of Kaolin. The elderly often have difficulty in using a bedpan with ease. They are happier with a commode or night stool which can be placed beside their bed for use when necessary. This gives the minimum of disturbance and exertion to both patient and attendant ; it also eliminates a psychological cause of constipation.

With regard to drugs other than laxatives, most old people need full doses to produce the desired effect. This is especially true of sedatives and hypnotics. A restless arteriosclerotic patient will often need 30 grains each of chloral hydrate and sodium bromide to produce sleep. Sometimes barbiturates or drugs like medinal and allonal are better in such cases. Opium and morphia may be given to the elderly in normal doses when required. With belladonna and others of the Solanaceæ, however, care is needed, since toxic symptoms may arise with even moderate amounts. Hence, in bronchitis with spasm, it is better to give

adrenaline or ephedrine, rather than the usual anti-spasmodic mixture, which is, incidentally, less effective. In cases with congestive heart failure, digitalis is apt to be rather disappointing and to produce nausea easily. More reliance should be placed on the virtues of mersalyl for immediate use than in younger patients, especially if there are signs suggesting pulmonary œdema. Of the analeptics, the most useful seems to be nikethamide (coramine). This may be used as a stimulant in cardio-respiratory distress or with toxæmic myocardial failure following an acute infection such as pneumonia. In the latter condition it is the only drug which seems to be of value, and far superior to digitalis when given hypodermically in doses of 2–5 c.c. twice or thrice a day. Where elderly patients are concerned, the sulphonamide group of drugs should always be exhibited early in the course of an infection and in full doses. Procrastination and timidity lead to myocardial toxæmia and fatal cardiac failure—much commoner in senility than with younger patients.

On the whole, it may be stated that there is no need to withhold alcohol from the aged patient. If he is used to it, he will suffer from deprivation ; if he is not, it will usually act as a valuable sedative and vaso-dilator. Whiskey and brandy have a place in the treatment of a slowly developing painful new growth. They lessen the need for morphia injections if given periodically during the day, and make the last days of the patient less wretched than would otherwise be the case.

Old people prefer to take drugs in liquid form rather than as tablets. The latter may have to be crushed and given in milk or some other drink. Also pills and tablets are often absorbed less effectively than fluids. Gargling is not performed well by the senile, so that sprays or lozenges are preferable forms of medication. As the veins of many old persons are very mobile, the intravenous route should be avoided for injections. Reaction to irritating solutions outside the vessel wall is a more serious matter than is the case with younger patients.

There is no need to be afraid of the results of surgery in the aged, provided that the dangers of a fall of blood pressure and of shock are not forgotten. Emergency laparotomy has saved the lives of many elderly patients with intestinal obstruction. The value of palliative surgery in malignant disease of the œsophagus, colon or rectum needs careful consideration, however. It does

not always give the prolongation of life and freedom from discomfort which is expected.

Physiotherapy has an important place in the treatment of old people. Heat, in one form or another, is a beneficial form of relief for the minor injuries and infections usual in old age. The fibrositis and osteo-arthritis common in the aged also get ease and improvement from heat and massage. Very often the physiotherapist can help a patient so that he remains up, active and about, instead of becoming bed-ridden, crippled or a " chronic."

The Dying

Sooner or later there comes a point in the management of a senile patient when the physician realises that he can do no more than ease the terminal stages of life. This last phase may have a duration of minutes, days or months, according to the nature of the case. It is often accompanied by a gradual fall of blood pressure and the diminution of muscular tone throughout the body. Sometimes mental confusion or obscurity becomes obvious as the first sign of approaching dissolution. Delusions and an increasing nocturnal restlessness are often seen in cases of cardio-vascular failure, accompanied by signs of peripheral ischæmia. Sudden bed sores, darkening of the skin of the heels and incontinence of urine and fæces are milestones on the way to death in those cases which, as Clifford Hoyle puts it, are " dying by inches." An increasing weariness in the facial expression may be noticed as the first sign of a change for the worse, or else numerous complaints of minor discomforts and pains in a patient previously stoical. When indications such as these are noted, interference with the patient should be reduced to the minimum. Unnecessary investigations or surgical interference should be eschewed, and the doctor ought to concentrate on alleviation of distress rather than systematic treatment.

Opiates, sedatives and hypnotics properly used will do much to ease the last days of the senile patient. There is no danger that the sufferer will become addicted to the drugs used, but sometimes there is a danger that the doses employed will not be sufficient to allay discomfort. Opium and morphia are the drugs of choice where pain or dyspnœa are present. Either may be given by mouth when prolonged action is desired. The use of morphia with hyoscine in cases with restlessness and irritability

is beneficial not only to the patient, but to anxious relatives around him. Soluble barbiturates, such as amytal sodium, nembutal and somnifaine are also valuable hypnotics where pain is not a predominant part of the clinical picture. The fact that they can be given by injection is a great point in their favour. Depression, so often seen in chronic cardiac patients and slowly growing cancers, may be abolished by alcohol, as previously noted. Clifford Hoyle suggests the use of cocaine in such cases, as being of considerable value. So-called " stimulants," such as camphor in oil, adrenalin, etc., have no place in the treatment of the dying. It is nothing more than the infliction of useless discomfort to administer them.

The cardinal points in the nursing care of the dying are comfort, cleanliness, warmth and prevention of thirst. During the last stages of weakness, it is more necessary than ever to change the position of the patient from time to time. Pressure points need constant attention. The heels are often best kept from contact with the bed by ring pads or a pillow placed under the ankles. Air rings help to prevent bed-sores if carefully arranged, but care must be taken not to leave a gap between the ring and the pillows. Another point to watch is the placing of the pillows so that the head does not loll and fall forward when the patient drops off to sleep. Bed-socks often give comfort if not too tightly fitting. Hot water bottles must be placed with care, since old people are easily burnt. They should be out of reach of the patient's hands, to avoid meddling. Often they are more beneficial when applied to the thigh than when placed at the soles of the feet.

Cleanliness is most important, and should include the toilet of the mouth and eyes as well as the more obvious parts of the body. As the end approaches, old people have not the strength to lift a cup to their mouth. The attendant must see that they get enough fluids, as thirst is one of the sensations of the dying. Even a moist swab in the mouth gives comfort to those who are unable to swallow. It is not necessary to force solid feeding on those *in extremis*, provided that they get sufficient liquid. Some patients, apparently unconscious, are still able to hear what is said around them, so that a guarded tongue is desirable. If consciousness is retained to the end, it is only kind for some relative or attendant to remain with the dying person to the last, so that they may have companionship on their road. As

morphia should not be withheld from the dying, so they should not be deprived of any mental or spiritual consolation. Noise or fussing is inexcusable, as the patient should be spared every discomfort, mental as well as physical. When there is little more which can be done for an old person whose race is nearly run, let that little be done with care, kindness and reverence.

CHAPTER III

NORMAL TEMPERATURE IN OLD AGE

THERE has long been confusion as to what may be regarded as the normal body temperature in old age. Williams (1925) is positive that the ordinary temperature in health is usually well below what is considered normal for an adult ; he says that it may remain steady at 97° F. Charcot (1867) stated that the temperature suffers no appreciable modification from the course of years and mentions axillary figures of 99·3° F. as being normal in a woman of over a hundred. Allbutt (1870) also claims that the temperature rises in old age as compared with middle life. Rolleston (1932) says that the internal temperature is almost constant at all ages, while Hutchison and Hunter (1939) state that the very old have a temperature higher than the middle aged unless the circulation is weak. Cannon (1942) quotes Schlesinger, Hirsch and Marsinkovski and Zhorova as agreeing that there is no change in advancing years.

This question of the normal in old age is not merely an academic matter. As may be seen by the cases in Chapter VI, it gives rise to great difficulty in marking the onset of a pyrexial infection which may need specific therapy. In the infirmary of the Royal Hospital, Chelsea, many of the temperatures recorded by routine measurement are below 96° or even below 95° F. It was therefore decided to investigate this matter to find out what figure could be taken as an approximate normal for the aged. A necessary preliminary to this was to determine the period for which the thermometer must be kept in position to obtain a satisfactorily correct reading.

An introductory trial was carried out on two healthy normal adults, aged thirty-four and forty-one respectively, with the N.P.L. tested instruments to be used for the investigation. It was found that the thermometers took five minutes to register 98·4° in the mouth or 97·4° in the axilla. Readings were then taken on fifty-two separate Chelsea pensioners in the infirmary with non-febrile disorders. The ages of these men ranged from sixty-three to ninety years. The temperature was taken in the mouth alone in 22 cases, in axilla alone in 15 cases, and in both mouth and axilla in 15 cases. Readings were taken for one