BEDSIDE DIAGNOSIS

By
CHARLES SEWARD
and
DAVID MATTINGLY

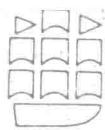
ELEVENTH EDITION

BEDSIDE DIAGNOSIS

By
CHARLES SEWARD
and
DAVID MATTINGLY

Foreword by
The late LORD COHEN OF BIRKENHEAD

ELEVENTH EDITION



CHURCHILL LIVINGSTONE
EDINBURGH LONDON AND NEW YORK

1979

CHURCHILL LIVINGSTONE
Medical Division of Longman Group Limited

Distributed in the United States of America by Longman Inc., 19 West 44th Street, New York, N.Y. 10036, and by associated companies, branches and representatives throughout the world.

First Edition 1949
Reprinted 1950
Second Edition 1952
First Spanish Edition 1953
Second Spanish Edition 1955
Third Edition 1955
Portuguese Edition 1955
Fourth Edition 1957
Fifth Edition 1960
First Greek Edition 1961
Sixth Edition 1962
Seventh Edition 1965
German Edition 1966
Eighth Edition 1969
Ninth Edition 1971
Tenth Edition 1974
Reprinted 1976
Third Spanish Edition 1976
Czecho-Slovak Edition 1976
Eleventh Edition 1979

ISBN 0 443 01418 3

British Library Cataloguing in Publication Data

Seward, Charles
Bedside diagnosis. — 11th ed.
1. Diagnosis
I. Title II. Mattingly, David
616.07'5 RC71 78-40729

Printed in Hong Kong by
Wing Tai Cheung Printing Co. Ltd.

Foreword to the First Edition

History may not repeat itself but historians do, wrote Philip Guedalla. From a like failing, the authors of our textbooks of medicine are by no means immune. For nearly three centuries they have accepted the doctrine of Sydenham that diseases are 'to be reduced to certain and determinate kinds with the same exactness as we see it done by botanic writers in their treatises of plants.' In their delineation of diseases they have emphasised 'certain distinguishing signs which Nature has particularly affixed to every species.' Thus, as every clinical teacher can testify, for many students diagnosis is a process of 'matching.' 'Which of the diseases described in my textbook,' asks the student, 'most closely resembles the clinical picture which the patient presents?' To simplify this task he searches for pathognomonic signs. He finds the diagnosis of tabes dorsalis unthinkable unless the patient shows Argyll-Robertson pupils and absent knee jerks; and in the absence of the classical triad of staccato speech, intention tremor and nystagmus he will overlook disseminated sclerosis.

In this handbook on *Bedside Diagnosis,* Dr Seward frees himself (and the enlightened students who will read and digest it) from the fetters of such irrationality. He bases his text on the concept of disease as a disturbance of function which may or may not be accompanied by structural change, and rightly stresses that the causes of disease are often indicated by the grouping and mode of development of symptoms and signs. Only from a knowledge of the normal and its range, and of the ways in which disordered structure and function express themselves, i.e. by symptoms and signs, can the site of the disease, the functional disturbances which accompany it, and its causes be inferred.

Dr Seward here considers most of the common presenting symptoms of disease, both of the body and of the mind. He perceives, however, that this dichotomy is largely artificial and that we do well to recognise not only the influence of mind on body (psychosomatic disturbances) but of body on mind (somatopsychic dysfunction). After discussing the normal anatomical and physiological mechanisms whose derangements give rise to the symptom or sign which is the patient's dominant complaint, he examines in such detail as is appropriate to the practitioner, its possible causes, and the associated clinical signs and accessory investigations which might help to establish the cause. This is clearly the rational approach to diagnosis and it is because this handbook exemplifies the method of sound diagnosis that Dr Seward is to be congratu-

lated on the result of his labours. Moreover, in these days of increasing specialisation, it is well that a physician of wide general experience and outlook should tackle the problem of diagnosis in a way which emphasises that any symptom, such as breathlessness, may arise from disease in many organs or systems—the respiratory or cardiovascular systems, the blood, the brain or mind. Unless the doctor is prepared to view man as a whole and not isolate him into separate compartments, it is certain that his diagnoses will be incomplete.

The student who masters the principles on which this handbook is based will have an intelligent and rewarding approach to the diagnosis of disease, and he will have laid a foundation which will remain firm whatever stress the superstructure of later knowledge may impose upon it. And even the experienced practitioner will learn much from its text.

Cohen of Birkenhead

Preface to the Eleventh Edition

Si nemo ex me quaeret scio; si quaerenti explicare velim nescio.

St Augustine

This book was begun in India in 1945 as a respite from the burden of the day and the heats. In reflecting upon what knowledge I had of medicine I came to realise that if this was unchallenged I thought that I understood but if questioned closely I did not in fact do so. I had come to the same conclusion as St. Augustine in the fifth century.

It has long been said that the remedy for ignorance of a subject is to write a book about it, hence these pages in which I have tried to classify what knowledge I had. With the rejection of Descartes' dichotomy of man into body and mind, each separate and without effect upon the other, we have returned again to the ancient wisdom:

'This is the greatest error in the treatment of sickness that there are physicians for the body and physicians for the soul, and yet the two are one and indivisible' (Plato).

The role of the psyche in the production of somatic symptoms in all the physiological systems of the body has called for a section in each chapter on psychogenic causes. In view however of their frequency and difficulty of recognition I have considered them as a whole in the opening chapter in which the two most important and common psychological illnesses, the Anxiety State and Depression, are dealt with. In this I have had the guidance of Dr Nancy Pears.

In the thirty years since the book's first appearance advances have continued in all the fields of medicine. This has necessitated many changes in successive editions; the book has grown in consequence in width and I hope in depth and clarity though the ground plan of diagnostic approach has remained. Discretion has been used however in the introduction of new matter for it is not the role of the textbook to 'dull the palm with entertainment of each new hatcht unfledged comrade'.

In recent editions the task of updating has been eased by the collaboration of Professor David Mattingly and with him an almost line-by-line revision has been undertaken for this edition. Some chapters have been wholly rewritten and none has gone unchanged. Dr Harry Hall has contributed the chapter on Coma and other of my colleagues have come to my aid.

Dr John Edgcumbe has read and advised me concerning the chapters

on Anaemia and Haemorrhagic Disease. Dr Robert Hart has helped particularly over the virological causes of Pyrexia and Dr Tom Hargreaves has checked the accuracy of Normal Values which are given in S.I. units and in traditional units. Dr John Smyth has advised on the respiratory disorders and Dr G. P. McLauchlan, Community Physician in the Exeter Health Care District, has kindly provided up-to-date figures for the incidence of infectious diseases and death rate statistics.

I remain obliged as always to Churchill Livingstone for the forbearance and helpfulness that I have experienced from this great publishing firm.

Exeter, 1979 Charles Seward

Contents

Introduction

Felix qui potuit rerum cognoscere causas —Vergil

This book has been written to meet what is believed to be a need, both of the medical student and the doctor. Its aim is to provide a link between the clinician's findings at the bedside or in the clinic and the systematic description of diseases in the more orthodox textbooks of medicine.

The first concern of the doctor confronted with his patient is diagnosis. The means to this end are his clinical knowledge, his skill in eliciting the history of illness and the physical examination, supplemented where necessary by such aids as the laboratory and X-ray examination may supply.

Some disorders may be diagnosed at the first encounter, but where this is not so, recourse to the formal textbook is of little immediate help for in it diseases are grouped and described under physiological systems. This presumes that a tentative diagnosis has already been made. A method of diagnostic approach in the consideration of symptoms and signs elicited is necessary then so that the search is narrowed to a point where the textbook can be usefully consulted.

Major symptoms and signs are not great in number and a score of them has been considered here in a way that serves to make this book complementary to the textbook. In practice the difficulty is less one of not knowing than of being unable to recall one's knowledge in an orderly and logical way.

Diseases are important not on account of their rarity or scientific interest, but in the degree to which they affect the life and health of the people and are susceptible of alleviation or cure. The student should then cultivate a preference for the probable. It has been well said that a small bird on a London chimney top may be a canary but is more likely to be a sparrow.

The starting point consists in obtaining a full and, if possible, accurate history. This may be surprisingly difficult. The student is sometimes enjoined to let the patient tell his own story but one may be baffled by a garrulous, confused, nervous, forgetful, exaggerating, minimising or untruthful patient. *Le secret d'ennuyer est de tout dire.* His story then must be guided towards the determining of the significant symptom, that which is primary rather than those arising from it or minor accompanying symptoms.

A few examples may make clear the principle of selection of the significant symptom.

1. A patient complains of debility, dyspnoea, palpitations and sternal pain on exertion and presents an appearance of pallor. The possibility of anaemia exists and therefore the blood picture must be ascertained.

If anaemia is found then it is likely to be the significant physical sign and its causes should be considered rather than the causes of those symptoms mentioned above which proceed from and are secondary to it. In particular, pain of anginal character may be due to a deficiency in quality as well as in the quantity of the coronary blood flow.

2. The anaemia in its turn may be due to a more fundamental cause such as haemorrhage. Thus a patient may consult the doctor because of his pallor or because of giddiness and faintness. On being interrogated he describes what has evidently been a loss of blood in his stools. Clearly this is the significant condition which calls for investigation.

3. An old woman was sent with the complaint of dyspnoea of recent onset awakening her, exhaustion and commencing anorexia and nausea. She was noted to have a pale appearance, atrial fibrillation, swollen ankles and painful osteoarthritis of one hip.

The haemoglobin was 5.2 g/dl (5.2 g/100 ml), but there was no recollection of blood loss. Tests for occult blood in the stool were positive and a barium enema disclosed a mild diverticulosis. The latter was thought unlikely to account for the anaemia and a barium meal revealed an hiatal hernia. She had been having phenylbutazone and digitalis. Both drugs were stopped and five units of packed red cells were given slowly in two sessions. The haemoglobin rose to 11.9 g/dl (11.9 g/100 ml), the heart became regular and her symptoms, save for occasional hip joint pain, ceased.

4. The patient may complain of debility and loss of weight, but if vomiting or diarrhoea, pyrexia or anaemia exist, the causes of these should be considered.

5. When headache is the patient's main complaint, but pyrexia is found to be present, the latter is the more fundamental sign for it is likely to be the cause of the headache.

Each chapter is divided in the following way:

1. SYNOPSIS OF CAUSES

The use of italics, perhaps somewhat arbitrarily, is intended as a guide to the more common or important disorders in Europe and the United States of America.

2. PHYSIOLOGY OF THE SYMPTOM OR SIGN

A brief note is given upon the mode of causation as far as this is understood and an endeavour is made to relate the physiology of the symptom or sign to the way in which its causes are classified in the synopsis.

3. DIAGNOSTIC APPROACH

Some observations are made in this section to show how the clinician, with the synopsis of causes in mind, should analyse the presenting symptom or sign. This analysis will enable him to narrow down the diagnostic field of possible causes and select the most likely among them for consideration.

4. THE DESCRIPTION OF EACH CAUSE OR DISEASE

Each major disorder is considered under the following headings:
Aetiology. Under this heading are mentioned the cause when this is known and any factors which may bear upon the diagnosis such as age and sex incidence and the influence of occupation or habits, temperament or heredity.
Clinical features. The characteristic features, where these exist, of the significant symptom or sign in the disease under discussion and of those that may accompany it are given. These findings as applied to the patient constitute the history of the present condition. Next follows the history of previous health, for only now will it be apparent what items are significant and what further information may be useful. The inquiry should begin in childhood. Was this serene and happy or overcast by fear and conflict with parents or other members of the family? One should proceed through adolescence noting whether he was away from school on account of illness and whether he played games. Did he serve in the armed services, perhaps in the Tropics, and was he off duty or invalided out on account of illness?

In civilian life social activities, marriage, employment and satisfaction therein should be noted. We should ask about the consumption of alcohol and cigarettes, partly in view of their possible role in aetiology but chiefly as a guide to temperament and character.

We will by now have gathered something of the kind of person with whom we are dealing, with what difficulties and anxieties, fears and conflicts he may have been confronted and his account of his responses to them. This is taken up in more detail in the chapter which follows. We will at this stage have assessed the value of his evidence. This depends upon intelligence and education, which enable him to give a picture of how he feels, upon his memory, and upon his 'symptom threshold', for discomfort in one person may be 'agony' in another.

Finally it depends upon what C.E.Montague has described in an essay *Three Ways of Saying Things* — overstatement, understatement and the truth. He remarks that the last of these is seldom employed but is most effective.

Where the possibility exists of a tropical disease in an immigrant, a visitor from abroad or a recently-returned holiday maker, a geographical survey should be made, the question 'Where have you been and when?' being asked. The importance of this has been stressed in the chapter on Pyrexia.
The examination. The physical examination then follows, the system which appears to be chiefly affected being examined first.
Investigations. Only at this stage should ancillary investigations be undertaken. These may be chemical, haematological, bacteriological or radiological and also such procedures as lumbar puncture and endoscopy of various hollow organs. They are referred to in the order of their

diagnostic importance in the disease under discussion. Valuable and even essential though they often are, the student is warned against the growing tendency to depend upon these aids and to employ them prematurely in the process of diagnosis. Medicine has indeed become a science, albeit an inexact one, but it is also an art and its concern is not with 'cases' but with sick men and women all differing in their individual responses, both physical and psychological, to disease. In practice our first clinical contact is not with a disease as met with in the textbook but with a patient complaining of symptoms or presenting physical signs.

The alternative to some such diagnostic approach as is given in this book is a haphazard consideration of the most likely causes that come to mind. This is no proper way to undertake that most fascinating, responsible and rewarding of all forms of detection, the diagnosis of disease. With regard to computer-aided diagnosis the use of this will make even more necessary a full, systematic and accurate assembling of clinical data, for the computer can only supply acceptable answers to properly posed questions.

THE INDEX

At the bedside the clinician is confronted not with diseases but with symptoms and signs. In this book a score of these is considered and the synopsis of each chapter analyses each symptom or sign under discussion into its causes or the diseases giving rise to it.

The index, which is chiefly one of diseases, is the reverse of this in that it refers back from a disease to the chapters where each symptom or sign to which it may give rise is discussed. It thus has further use in listing the more important ways by which a disease may manifest itself. Heavy type is used to show where the definitive or fuller description of the disease is given.

CHAPTER 1

Psychogenic Symptoms

'In tragic life, God wot, no villain need be! Passions spin the plot: We are betrayed by what is false within' – Meredith.

The physician in his approach to illness must be aware of man in his three aspects, physical, psychological and social, for these may act upon each other in the production of symptoms. As Maudsley put it: 'The sorrow that has no vent in tears may make other organs weep.'

In an address to the students of Edinburgh University in 1953, Sir Sydney Smith said: 'There is no such thing as a diseased organ in isolation; there are no diseases to treat but only diseased men. Do not forget that you are dealing with the whole man – not only the body – but the man himself. You must take into consideration not only his physical condition but also his general environment, including his work and his domestic affairs, in so far as they may have some relationship to his physical and mental state. You must remember that many patients come to you not only suffering from damaged bodies but with bruised minds, lacerated consciences and broken hearts. You have not seen examples of these in your museums, but they are real enough, and much of your success as family doctors will depend on the care and understanding with which you treat such matters.'

The purpose of this confessedly elementary chapter is to remind us that symptoms may be induced by psychological as well as by somatic disorders and to consider the genesis of these in the two most common of such disorders, the Anxiety State and Depressive Illnesses.

As to the frequency of these I am indebted to Dr Denis Gray for the following analysis of cases seen in his general practice of 2,840 patients during 1974:

	Male	*Female*	*Total*
Anxiety	27	75	102
Depression	21	71	94
Schizophrenic/paranoid delusions	1	3	4
Alcohol and drug dependence	7	3	10
	56	152	210

This approach should redeem the book from the risk, inherent in the employment of a somatic classification of causes of symptoms, of

overlooking psychogenic causes. It may counter also the tendency to label disorders as functional or organic. In practice it is seldom that one meets with an illness belonging wholly to either category. A patient with a broken limb may well experience anxiety and conversely emotional stress may induce asthma or perhaps a duodenal ulcer. The effectiveness of modern therapy in the treatment of many forms of psychological disorder has made their early recognition more worthwhile but, whilst treatment is in no way our concern in this book, the numerous side effects which may be due to psychotropic drugs themselves must be borne in mind. Reference is made to these in the chapters which follow. Hippocrates' conception of the division of the body into four humours with the corresponding temperaments: melancholic, phlegmatic, choleric and sanguine, persisted until the 17th century. These terms are still employed and we recognise in ourselves and others a temperamental range from the grave and serious-minded to the placid and equable, and on to the naturally gay and cheerful person. These settled habits of mind are subject to mild fluctuation in response to usually recognisable causes. Such alterations of mood vary in degree and duration according to our innate mental stability and, of course, to the significance to us of the provoking situation, but the response is normally brief.

There is moreover a wide range of energy potential, psychological and physical, among people. One finds some who are almost indefatigable whilst others have tired readily all their lives. Yet no disease of mind or body may be found, intake of food is normal in quantity and quality and such subjects suffer physical illness no more frequently and die no sooner than their vital and more robust brethren.

NATURAL ANXIETY

We may consider first this universally experienced phenomenon as it is seen in the normal balanced individual. Anxiety is akin to fear, geared originally to a response to some primitive environmental challenge or threat to survival. Acting as it does through the autonomic and endocrine systems it constitutes a preparation for fight or flight. In the former aggressive response the subject may 'imitate the action of the tiger, stiffen the sinews, summon up the blood, disguise fair nature with hard favour'd rage; then lend the eye a terrible aspect'. In the latter the response may take the form of trembling, sweating, nervous restlessness, palpitation, tachycardia and other manifestations of fear. This may be seen in such situations as that preceding an examination or the delivering of a speech. It is commonly and may invariably be experienced even by a seasoned actor prior to his going on to the stage; it may indeed enhance his performance.

These reactions to an environmental threat were of value to man in his primitive state and they remain essential to the lower animals. In civil life however danger of a physical kind, which would be countered in

these ways, has been largely eliminated, yet the primitive bodily responses to fear of whatever kind persist and distress without aiding us.

Such anxiety is then perfectly natural and, as has been said, affects us all at times but it is transient and subsides with the passing of whatever occasioned it.

When the cause persists a solution is demanded and the perfect answer is to master the difficulty by overcoming or abolishing it; to oppose 'the slings and arrows of outrageous fortune, or to take arms against a sea of troubles, and by opposing end them'.

In a more intractable situation the perfect solution may not however be possible and the problem can only be solved by adaptation to it. The limitation is consciously accepted and lived with; what can't be cured must be endured. Sublimation has been achieved.

None of us however is invulnerable and a stressful situation may be or may seem to be beyond one of these solutions. This is likely to be the case in the psychoneurotic individual who may respond by the development of an anxiety state or a reactive depression.

NATURAL DEPRESSION

We have spoken of anxiety as being a normal reaction to stress, experienced by everyone at times. Depression of mild degree and short duration may equally occur in the normal person in whom mood swings from low spirits to gaiety appear without obvious cause.

Depression may have transient physiological causes, as in the form commonly experienced before and during the menses, though this may be severe. The reaction of grief to bereavement is again normal but if too profound or too prolonged may amount to depressive illness. Depression then is a feeling of being 'run-down', low, dispirited or sad; only when its degree or persistence in relation to the provoking cause is excessive will it be regarded as abnormal – a depressive illness.

THE PSYCHONEUROTIC PERSONALITY

We must now consider the origins of that state of vulnerability which reacts to stress by the development of an anxiety state or a depressive illness. It would seem that both heredity and environment (nature and nurture) play parts in the evolution of such temperaments and a family history of mental instability or actual mental illness should be sought and is commonly found.

IN THE HOME

The infant from its first arrival upon the stage of life becomes in all cases subject to anxiety-provoking situations, the first being hunger. The mother, who may have given the child its temperament, is the most important element in its environment, and the boon of a calm, happily secure background may be absent because she herself is unstable or

because of a domestic climate of disharmony or even violence. The child may suffer from unkindness, neglect and, basically lack of love. Insecurity may be engendered in these ways or by, for example, its own or the mother's prolonged absence in hospital. Children with mental or physical handicaps may suffer more in this way, or on the other hand develop undue dependence on an over-protective parent. Jealousy of brothers or sisters, particularly of a new arrival in the family, is commonly seen.

At school

Failure to adjust to school, or bullying, may induce anxiety which is apparent to others, or appear as headache, abdominal pain or vomiting. It may take the form of behaviour disorders or phobias; obsessions or conversion hysteria may develop. With these, and often masked by them, there may be depression. This may arise from a loss of self-esteem or self-confidence in children, or as a consequence of failure in examinations or games. It is often enhanced by the expressed disappointment of parents over the child's lack of progress. A change of environment and therefore of school may depress children who miss their former friends and fail to make new ones. Early recognition of sustained changes of mood or behaviour at this stage, when it is most able to be treated, is important.

Adolescence

This is a time of physical, emotional and intellectual development with a changing relationship to the family and the outside world. The reaction to stress may appear as anxiety or as aggressiveness and rebellion.

In adult life

As contact with the world increases, fears, anxieties and conflicts inseparable from growing up arise and press more onerously upon the vulnerable. Possible causes of stress are innumerable and arise largely in the sphere of Adler's 'three S's' – sex, social relationships and subsistence. These include the 'cooling off' in affection of a fiancé, the fear of pregnancy, a broken engagement or bereavement, bad relations with a business colleague, fear of dismissal from employment or the 'promotion neurosis', in which fear of inadequacy for the task and desire to advance the status and salary are in conflict. The list of examples could be multiplied ten-fold.

THE ANXIETY STATE

The psychoneurotic person may have exhibited recognisable traits since childhood in the form of timidity and shyness, lack of self-confidence and a tendency to worry over trifles. The unacceptable or unpleasant experiences encountered may have undergone repression into the

unconscious mind. The continued expenditure of energy in maintaining repression may eventually become insufficient to meet the day to day demands of his environment.

Some stress perhaps trivial may then, by association of ideas, evoke the repressed matter masked as various symptoms and prove to be 'the last straw'. 'Breakdown' occurs as an acute anxiety state. The buried cause is of course unrecognised by the patient and the symptoms, psychological or remote, appear in an acceptable guise.

As has been said these innumerable situational stresses, in infancy, in the growing child and adolescent and later in the outside world, are part of the human situation. Failure of adaptation to these results in the formation of the psychoneurotic personality.

It should be clear that in this field diagnosis depends largely upon awareness that many physical symptoms may have a psychological origin and also upon knowledge of the patient's temperament and personal and family history. Herein lies a strong argument for the preservation of the family doctor whose unique knowledge of his patient's heredity and physical and emotional background places him in a position of great advantage over the physician and the specialist.

Psychological symptoms

In an anxiety state these are essentially expressions of increased emotional tension; the prevailing mood is one of anxious foreboding or even panic. There may be apparently causeless nervousness, uneasiness, or apprehension. The subject is usually irritable and excitable, concentration is poor and broken sleep leads to readily induced fatigue and a feeling of malaise or exhaustion. Concern over possible organic disease may become obsessive – hypochondria – and reassurance following negative investigations may not be accepted. Finally, the subject may resort to alcohol (the oldest tranquilliser) or to other drugs, or increase his smoking. When alcoholism or drug addiction are seen, anxiety or depression should always be borne in mind as possible causes.

Somatic symptoms

These are prominent and are largely mediated through the autonomic nervous system. Headache may be induced by hypertonus of the occipital and frontal muscles.

Palpitation, tachycardia, praecordial pain and dyspnoea with sweating and fatigue form a syndrome formerly known as 'Disordered Action of the Heart' (Tachycardia. p. 249). Asthma may be precipitated by anxiety and the alimentary canal commonly responds to stress by dryness of the mouth, dysphagia, vomiting, gastric or colonic pain or diarrhoea. Other symptoms include frequency of micturit on, impotence and pruritus.