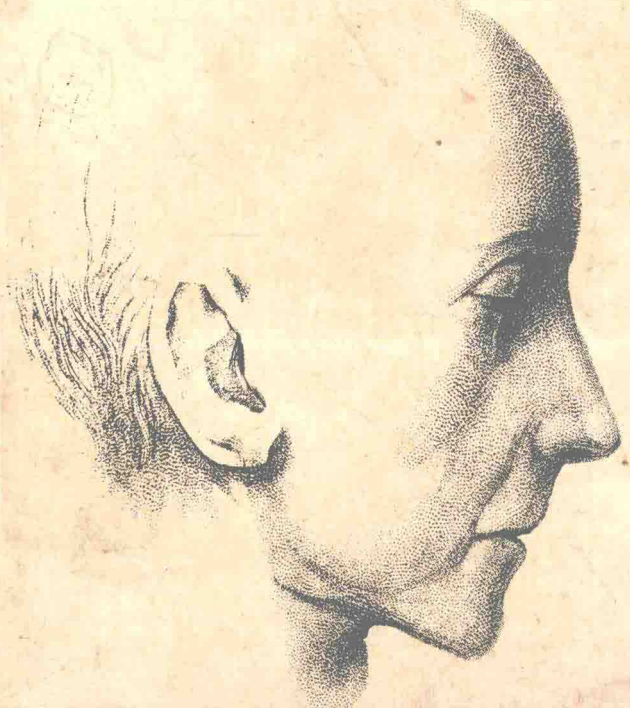
SYMPTOM ANALYSIS & PHYSICAL DIAGNOSIS IN MEDICINE

A. Davis & T. Bolin



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Preface

The objectives of this book are to guide the student in the taking of a competent medical history and to carry out a thorough physical examination of patients. This includes an analysis of the important presenting symptoms which enables a provisional diagnosis to be reached. Symptom analysis requires a knowledge of aetiological factors so that if the patient has not already volunteered the necessary information the relevant diagnostic questions can be asked.

The chief aim of physical examination is to confirm the provisional diagnosis. It may also reveal other pathology which may be suspected following the symptom review. Should unexpected physical signs be found then this may suggest inadequate history-taking or multiple pathology.

Again we have emphasised only common medical conditions related to presenting symptoms. The principle of symptom analysis however, is pertinent to rarer symptoms in that relevant diagnostic questions can be devised. We have deliberately refrained from giving exhaustive lists of causes for conditions described. The rare causes omitted can, in most instances, only be diagnosed by using ancillary aids and consequently are beyond the scope of this book. However, at times rare causes are included in a differential diagnosis as in these cases the physical signs described may be the clue to the definitive diagnosis.

A E DAVIS
T D BOLIN

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SYMPTOM ANALYSIS

1

THE TAKING OF A MEDICAL HISTORY

The taking of a competent medical history is a skill which requires, in addition to a broad knowledge of medicine, an awareness of the interactions occurring in an interview situation. When the patient first presents, he is often tense and anxious. He may be concerned that his symptoms reflect a serious underlying disorder. However, this anxiety may be due to his previous experiences with doctors, or he has a pre-conceived idea, perhaps based on rumour, that the doctor may be unsympathetic. Consequently, to relieve this anxiety, the patient needs to be put at ease; this requires time. In addition to the empathic approach of the doctor, the setting in which the interview is conducted is important. Privacy, the way in which the room is furnished and the fact that the interview is conducted in a non-threatening manner facilitate the taking of the history. The doctor who attempts to hurry his patient and not allow him adequate time to give a full account of his story is unlikely to achieve the necessary rapport.

When the patient is at ease the history-taking may be initiated by the doctor asking "Tell me about yourself" or "What are your problems?" and "tell me about them". If the patient has difficulty in dating the onset of his symptoms then this may be determined by asking the question "When were you last in good health?" The patient may not necessarily recount his symptoms in the order in

which they occur, the emphasis being placed on the symptoms which are of most concern to the patient. Only when the full history has been obtained can it then be organised in a sequential fashion suitable for recording.

The manner in which the interview is conducted is set in the first few minutes. Should the interview begin with direct questions being asked requiring yes/no answers, then it will be extremely difficult to get the patient to speak spontaneously later in the interview or indeed at subsequent interviews. The patient has expectations of what the doctor wants to be told and as he is usually anxious to please the doctor, he will be sensitive to both conscious and unconscious cues given by the doctor. In fact, when leading questions are asked the answers may reflect what the patient thinks the doctor wants to hear, rather than the true facts. This is especially so when there is judgemental connotation in the words used — for example "Do you drink heavily?" The patient's answer to this question will almost certainly be "No". However if the question is phrased in a different way, for example, "Tell me how much alcohol you drink" the answer is much more likely to be closer to the truth.

The patient should be encouraged to relate his history in his own words without the interviewer appearing to direct or disrupt the continuity of the history. Some patients will of course need more direction than others in relating their story. The amount of direct questioning needed with individual patients will come with experience and initially it is better to err on the side of less direction.

It may be impossible for reasons such as the physical ill-health of the patient to obtain a comprehensive history at the first interview, and subsequent interviews are required. It should also be realised that history-taking is an on-going process and the doctor must be prepared to re-assess the diagnosis and treatment at any time as new information is obtained.

Early in the interview it will be apparent that there are one

or more symptoms which are of particular importance and later these must be analysed in detail. This will require tracing the course of the individual symptom by establishing the mode of onset — whether insidious or sudden; whether the symptom is steadily worsening, intermittent, improving or changing in character, and whether there are any known exacerbating or relieving factors. It should also be noted what effect this symptom has on the patient's mental, physical, and social well-being, and what relationship it has to any other symptoms. The patient's interpretation of his symptom may be determined by asking a question such as "What do you think is wrong with you?" This may be very revealing as the answer will be influenced by what he has been told by other medical personnel, his own experience of personal illness, and the illnesses of relatives and friends, intermingled with folk-lore, myths and superstition. Thus, a significant component of his symptoms may be relieved by simple reassurance.

While the patient may have correctly attributed his symptoms to a disorder of a particular organ, this interpretation should not be taken at face value. Only an understanding of structure and function enables the correct interpretation of each symptom. The patient may use medical terms to describe his symptoms. Enquiry must be made as to what he means in lay terms as his usage may be inappropriate. For example, the patient who complains of feeling "gastric" may not be referring to pain in the stomach but indicating he has diarrhoea. Furthermore, if the patient speaks about a pain in the "stomach" this may be anywhere in the abdomen and he should be asked to indicate, by placing his hand over the affected region, the site of the pain. Another example is that of the patient who complains of palpitations; he may mean that he has a rapid regular heart beat, a sensation of the heart periodically turning over, or consciousness of the slow beating of the heart. These reflect a variety of cardiac rhythms.

If a patient recounts previous diagnoses made by other

doctors, or operations that have been carried out, it is essential that enquiry be made about the circumstances of these illnesses, symptoms that were present, and the treatment that was given. It will then usually be possible in retrospect to come to some accurate diagnosis and this may be at variance with that given by the patient.

After the patient has concluded the history of the present illness it is of benefit to both patient and doctor for the doctor to recapitulate the history so that the patient can confirm whether there are any omissions or errors. It also enables the doctor to organise the sequence of the story in his own mind.

At this stage an attempt should be made to answer the following questions:—

1. Are the symptoms compatible with some recognised disorder of structure and function, e.g. breathlessness consequent upon cardiac failure or breathlessness consequent upon chronic obstructive airways disease, or is it that the breathlessness is consequent upon anxiety and associated hyperventilation?
2. Is a specific disease process suggested, for example breathlessness consequent upon cardiac failure, this in turn being due to ischaemic heart disease?
3. Does the disorder of structure and function explain all the symptoms or do additional symptoms suggest multiple pathology?
4. Is the effect of the symptoms on the patient's life-style and social relationships appropriate?

To enable these questions to be answered each symptom must be examined in depth, and if the above questions cannot be answered it is usually the fault of the history-taking and the history should be taken again. The examination of each symptom and any conclusion made regarding the underlying disorder of structure and function requires a knowledge of aetiological factors so that the appropriate diagnostic questions can be asked. For example with the symptom of difficulty in swallowing

(dysphagia) the patient may not have connected a long preceding history of heartburn with the onset of dysphagia. Therefore, a positive answer to the appropriate diagnostic question "Have you ever had heartburn or a bitter fluid come into the mouth?" establishes the likely diagnosis of a peptic stricture. The relevant questions pertaining to dysphagia should therefore logically be asked during the analysis of the symptom "dysphagia" rather than being asked during the symptom review. It is a common misconception that the symptom review is isolated from the history of the present illness; this is not so. The symptom review in fact is a screen to detect other important symptoms that the patient may regard as not relevant to his present problem.

SYMPTOM REVIEW

Specific enquiry concerning symptoms relevant to other systems should now be made as patients may have other important symptoms that they have not mentioned. These additional symptoms may or may not have a relationship to the presenting symptoms.

1. CARDIO-RESPIRATORY SYSTEM

Are you short of breath on exertion?
Have you ever been woken at night with shortness of breath?
How many pillows do you sleep on?
Have you had any pain in your chest?
Have you had palpitations or are you conscious of the beating of your heart?
Have you had any swelling of the feet?
Have you had a cough? Do you cough up any sputum?
Have you noticed any blood in the sputum?
Do you have pains in the calves on exertion?
Have you had a recent chest x-ray?

2. GASTROINTESTINAL SYSTEM

Do you have any problems in swallowing?

Have you had any indigestion or abdominal pain?
Do you take Quik-Eze or any white mixtures?
Are your bowels regular and if so how many motions a day do you have?
Have you ever vomited blood?
Have you noticed any blood in the motion?
Have your motions ever been black?
Have you ever been jaundiced; that is, have your eyes or skin ever been yellow?

3. NERVOUS SYSTEM

Do you feel depressed, tense or have you had any problems with your "nerves"?
Do you suffer with headaches?
Have you had any fainting episodes, fits or blackouts?
Have you had any problems with sleep?
Have you ever had any dizziness, deafness or ringing in the ears?
Have you had any blurring of vision or double vision?
Have you had any weakness or numbness in the limbs?

4. GENITO-URINARY SYSTEM

Have you ever had any problems in passing urine?
Do you have any discomfort or pain on passing urine?
Do you experience any delay in starting to pass urine?
Is your stream as good as it used to be?
Do you get any dribbling at the end?
Do you have to get up at night to pass urine and if so how many times?
How much do you pass — is it large amounts or small amounts?
Has there been any change in your interest in sex?
How often do you have intercourse now?
Do you have erections and if so can you maintain them?
Have you any difficulties in your sex life?
Are your periods regular and when was your last period?
Is the loss excessive?
Are the periods painful?

Do you have a vaginal discharge or notice staining of your underwear?

5. MISCELLANEOUS QUESTIONS

Do you regard your diet as adequate?
Tell me what you ate yesterday.
Is that representative of your normal diet?
Have you noticed any change in your weight?
Have you noticed a change in your appetite?
Have you noticed any increased sweating?
Have you had any skin rash?
Have you had any pain, swelling or stiffness of the joints?
Has anyone noticed a change in your complexion?
Do you bruise easily?
Have you noticed any lumps or swellings?
Have you noticed, or has anyone else commented, on any change in your appearance?
Is there anything else you would like to discuss?

PAST HISTORY

General enquiry into past history should be made. This includes significant medical illnesses and operations. Questioning about previous hospital admissions may trigger the patient's memory concerning operations such as appendicectomy or repair of a hernia that the patient considers trivial and may not have mentioned.

Relevant questions

Have you ever had an illness like this before?
What other illnesses have you had?
What childhood illnesses did you have?
Have you had any illness such as rheumatic fever, kidney trouble or tuberculosis?
Do you have any allergies and in particular have you ever had any reactions to drugs?
Have you had any illnesses associated with pregnancy?

Have you had any operations?
Have you ever been in hospital?
Have you ever had an examination for an insurance policy and was the policy granted?

FAMILY HISTORY

As many disease processes have a genetic background or are precipitated by common environmental factors it is important to take a family history.

Relevant questions

Is there any history of similar illness in the family?
Are your parents alive and well; if not, from what did they die, and at what age?
Are your brothers and sisters alive and well, and if not from what did they die, and at what age?
Have there been or are there any other illnesses in the family?

PERSONAL AND SOCIAL HISTORY

As environmental and emotional factors contribute to the aetiology of many diseases, and their subsequent course, the social and personal background of the patient is always important. As the doctor may feel uneasy about enquiry regarding personal details it is often best to start asking questions in less emotionally charged areas, for example, occupation, and then gradually proceed to enquire about more personal details.

Relevant questions

What is your occupation and where do you work?
What jobs have you had in the past?
Do you live in a house, flat or hostel?
Who else lives there?
Where have you lived in the past?
Where do you or your family come from originally? (If appropriate)
Have you been overseas?

How is your illness affecting the family?
How are you off financially?
What sort of a person is your wife (husband)?
How do you get on together?
Are there any domestic problems?
What is the physical side of your marriage like?
How do you get on with other people both at work and socially?
Do you make friends easily? (If not, what is the problem?)
What religion are you? and do you have any problems in that area?
Do you smoke? How many cigarettes a day on average?
Do you drink alcohol? What would be your usual intake per day?
Do you take any medications or drugs that have either been prescribed by a doctor or bought at the chemist? (This particularly includes medications for constipation and headache.)
Do you need anything to make you sleep? If so, what and how many tablets do you need to get a good night's sleep?

RECORDING OF THE HISTORY

The history must be recorded as an accurate sequential account of the course of the illness and this is usually not the order in which it was obtained. It should be written in such a way, that some other person should be able to read the history, understand the events that have occurred and the logic behind the conclusions that have been reached. A suggested outline for recording the history is:—

1. *Identification data:*

Name, age, sex, address, occupation, single/married, widowed or divorced, religion.

2. *Presenting symptoms*

These are recorded in the patient's own words and their duration noted. For example —

- Pain in the chest while walking during the past 6 months.