### **History of Medicine**

# Galen on the Ideal of the Physician

P. BRAIN

Galen, who practised in Rome in the second century A.D., left a mass of works filling 22 large volumes in Kühn's nineteenth-century edition, which gives the Greek text with a Latin translation. Many of them have never been published in translation into modern languages, and the classical scholar, unless specially interested in ancient medicine, is likely to be deterred by Galen's specialized subject matter and by his verbosity. Consequently not many people today know what he said, which is a pity, for much of it is relevant to modern medicine. I offer here a translation of his little work, That the Best Physician is also a Philosopher, made from the Greek. I have tried to preserve something of the rather complicated and rhetorical style, and have added a few notes.

# THAT THE BEST PHYSICIAN IS ALSO A PHILOSOPHER

What happens to most of the athletes who have ideas of victory at the Olympic Games, but undergo no training to bring this about, happens also to most physicians. They praise Hippocrates, whom they consider the best of all; but as for making themselves like him, they will do anything rather than this. He says that astronomy makes up no small part of medicine,2 and this clearly applies also to the study that must necessarily precede it, namely geometry; yet not only do they take no part in these studies themselves, but they find fault with those who do. The same is true of the nature of the body. Hippocrates thought it worth while to study it in detail, describing it as the beginning of all medical knowledge; but they, again, are so hasty in these matters that not only are they ignorant of the nature and texture of each part, or of its shape, its size, and its relations with adjoining structures, but they do not even know where it is situated. Hippocrates, when exhorting us to rational contemplation, observes that doctors make mistakes in the indications for treatment through not knowing the classification of diseases into genera and species; but the physicians of today fall so far short of practising this, that they accuse those who do of futile activity. He says further that we ought first to ascertain the diseases that the patient has had in the past, and those he has at the present time, and those that are likely to affect him in the future, as matters to which we should give the greatest attention; but they have studied this part of the curriculum so enthusiastically that, if one predicts that a patient will have a haemorrhage or a sweat, they stigmatize him as a wizard

and a relater of marvels. Scarcely would they be able to endure it if one were to predict the other things that were going to happen; scarcely ever do they plan their regime to meet the coming crisis of the disease, though Hippocrates orders his management in this way. What then remains, in which they do emulate the man? It is not skill in exposition, for in that he was successful while they are so much the reverse that we see many of them making two mistakes in a single word, an achievement that is not easy to imagine. So it seemed to me that I should seek the cause, whatever it may be, by which, although they all wonder at the man, they do not read his writings; or by which, if one of them should chance to read them, he would not understand what was being said; or by which, if he should happen to understand, he would not combine understanding with practice, so as to establish it and make it habitual, finding out, by determination and by ability, all the things that Hippocrates has accomplished and bestowed upon men. If the doctor is deficient in either of these qualities he must fail to reach his goal. It is just the same with athletes, whom we see, either through lack of physical capacity or of enthusiasm for training, failing to achieve their aims. But if an athlete has the physique of a champion, and if his training is beyond reproach, what can prevent him from carrying off the crown in the contest? Are the physicians of today unfortunate in respect of both these qualities, having nothing remarkable to offer either in talent or in industry, or is it that they have one, but lack the other?

Now it seems improbable to me that no one is being born today who has the intellectual capacity to absorb the art that serves humanity, since the world was the same then as it is now, and there has been no variation in the arrangement of the seasons nor any alteration in the sun's path, and no celestial body, either fixed star or planet, has undergone any change. It is reasonable, therefore, to suppose that it is through the poor education that the men of today receive, and through wealth being more highly honoured than excellence, that no one like Pheidias among sculptors, nor like Apelles among painters, nor like Hippocrates among physicians, has appeared; and this in spite of the fact that we, who were born after those men of old, enjoy no small advantage in receiving from them the arts which they have already in great measure advanced. We may learn easily in a few years the things that Hippocrates was long in discovering, and employ the rest of our lives to find out whatever remains. But it is not possible for a man who regards wealth as more worthy of honour than virtue, and the Art as something to be studied for profit rather than for the good of mankind, to seek its true ends. Others outstrip us in money-making, and reach that goal before us. For it is impossible at

Natal Blood Transfusion Service, Durban

P. BRAIN, M.D., Medical Director

Date received: 17 June 1977.

the same time to engage in business, and to practise so great an Art; you must despise one of them, if you are to press on with all speed towards the other.3

I take it, then, that we will not find one of the men of today, whose only aim is to amass possessions, asking to what extent we ought to provide for the essential needs of the body. But is there someone who can not only shape in words, but demonstrate in deeds the limit of wealth that nature sets, to which we can go without suffering from hunger, or from thirst, or from cold? Indeed, if there is such a one, he will hold Artaxerxes4 and Perdiccas in contempt. He will never even come in sight of them. He heals a patient whose illness calls for the Hippocratic art, yet he does not think it right to stay with him always, but he treats the poor inhabitants of Cranon and of Thasos5 and the other towns. He leaves Polybus<sup>6</sup> and his other disciples to attend to the people of Cos and the other citizens, while he himself sets his course to wander over the whole of Greece, since he must also write something concerning the nature of places. So that he may test by experience the things he teaches in words, it is absolutely necessary for him to see for himself cities that face towards the south and towards the north, and those towards the rising of the sun and those towards its setting. He must also examine the city lying in a hollow, and the one situated on a height; the one that uses waters brought from elsewhere, and the one that uses spring waters, or rainwater, and that which uses the waters of lakes and rivers. Neither must he fail to notice whether one uses very cold waters, or one hot; or waters containing nitre, or alum, or other things of this kind. Again, he must examine a city situated near a great river, or near a lake, a mountain, or the seashore, and observe all the other things, of which he has himself taught us. So, not only is it necessary that one who would become like him must despise possessions, but he must also be a great lover of hardship. And indeed one who is fond of drink cannot love hardship, nor one who gormandizes, or is inclined to venery: anyone, in short, who is a slave to his genitals or his belly. The man, therefore, who is found to be a true physician must be a friend of moderation, just as he must be a companion of truth. He must also practise logical method, so that he may know how many diseases exist, classified according to genera and species, and how to obtain some indication of the remedy to be used for each of them. This same method also teaches the nature of the body, which is made up of the primary elements which are entirely mixed together, and of the secondary, perceptible, materials that are also called tissues, and thirdly, in addition to these, of the organs. But further, of course, the logical method teaches us that we must consider the use to the animal of each of the said things, and what the action of each is, convincing ourselves, not without testing them, but by demonstration.

What reason, then, remains why the doctor, who practises the Art in a manner worthy of Hippocrates, should not be a philosopher? For since, in order to discover the nature of the body, and the distinctions between diseases, and the indications for remedies, he must exercise his mind in rational thought, and since, so that he may persevere laboriously in the practice of these things, he must despise riches and exercise temperance, he must already possess all the parts of philosophy: the logical, the scientific, and the ethical. Nor need he fear, if he condemns riches and lives temperately, that he will be doing something out of place; for all the rash and unjust things that men do, they do because they are seduced by covetousness, or bewitched by pleasure. So he must of necessity have the other virtues as well; for they are all connected, and it is not possible to take any one of them without all the others following at once, as if strung on a single thread.

And indeed if, for learning the Art from the beginning, and for exercising it in due order, philosophy is necessary for physicians, it is clear that whoever is a physician must be altogether a philosopher. I do not think it needs further proof that philosophy is necessary for doctors if they are to use the Art correctly, when practitioners who are no physicians, but poisoners, are daily before our eyes: lovers of money who abuse the Art for ends that are opposed to its nature. Should you, then, still quarrel about names and dispute over trifles, maintaining that one ought to describe the doctor as firm, temperate, incorruptible, and just, but not as a philosopher? and admitting that he knows the nature of bodies, and the action of organs, and the uses of the parts, and the classification of diseases, and the indications for drugs, but not that he engages in logical contemplation? Having conceded these facts, are you not ashamed to quibble over words? But enough of this. It is better that you should come to your senses, stop arguing about voices like the jackdaw or the crow, and study the truth itself of the matter. You could not maintain that whereas a weaver, or a skilled shoemaker, could never come into being without instruction as well as practice, yet a man who is just, and temperate, and skilled in exposition, and an expert in the sciences, could suddenly burst upon the scene, having neither had any need of teachers, nor given himself any course of training. So if this would be an impudent assertion, the other also must be the assertion of someone who is not disputing about facts, but only about names; and it should be our first duty to study philosophy, if we are to be true followers of Hippocrates. And if we do this, nothing can prevent us from becoming like him, and indeed even better than he was; learning the things that he has so well set down, and ourselves discovering those that remain.

#### NOTES

Claudii Galeni Opera Omnia, ed. C. G. Kühn. Leipzig, Cnobloch. 1821 - 1833. Reprinted, 1964: Hildesheim, Olms. The work translated is in vol. I, pp. 53 - 63:
 Galen is quoting from the Hippocratic work Airs, Waters, Places, chapter 2. Unlike some modern authorities, Galen believed that Hippocrates, who lived in the fifth century BC, had actually written some of the works popularly attributed to him, including this one. Astronomy in this work embraces, a great deal that we would now call climatology.

of the works popularly attributed to him, including this one. Astronomy in this work embraces a great deal that we would now call climatology.

This is a most interesting passage. There is no doubt, to me at any rate, that Galen, who was not a Christian, has in mind the saying of Christ recorded in Matthew 6, 24 and again in Luke 16,13: 'No man can serve two masters; for either he will hate the one, and love the other; or else he will hold to the one, and despise the other. Yes cannot serve God and mammon.' (Authorised Version). Galen uses the same Greek words for 'despise the other' as are used in the Gospels, but in a different grammatical construction.

This man is of course Hippocrates. Plutarch, in his life of Cato, records the tradition that Hippocrates refused to treat the Persian king (Artaxerxes), although an enormous fee was offered, saying that he would never attend an enemy of Greece. I do not know the connection with Perdiccas, who was a king of Macedon.

The people of Thasos appear in those most Hippocratic of the works

in the Corpus, *Epidemics* I and III. But although their case histories are carefully, if briefly, described, treatment of any kind is seldom mentioned. The author seems to be a detached observer, scientifically recording the progress of their illnesses, most of which were fatal. It may have been these works that caused the physician Asclepiades to call the Hippocratic method an exercise in death. I cannot imagine that most of the poor people of Thasos — at least those described

in these works - would have thanked Hippocrates for his charitable

 Polybus was Hippocrates' son-in-law, which shows that, though not
a slave to his genitals, he did find some time for pursuits other than medicine. The first half

The first half of Airs, Waters, Places deals with the effects of situation, climate and water supplies on health.

## Leukaemic Involvement of the Pleura

### A Case Report

R. J. JACOBSON, H. J. JACOBSON, D. P. DERMAN

### **SUMMARY**

In chronic myelocytic leukaemia (CML), the pleura is a most uncommon site of extramedullary involvement. A 34-year-old man with CML presented with a massive pleural effusion. His peripheral blood contained few blast cells and the leucocyte alkaline phosphatase level was low. Cytological examination of the pleural fluid revealed cells with the morphological features of myeloblasts and monoblasts. The patient was treated with systemic chemotherapy, with no effect on the leukaemic pleural effusion.

S. Afr. med. J., 52, 938 (1977).

In chronic myelocytic leukaemia (CML), extramedullary manifestations may involve a variety of organs and tissues.1-4 Schwartz and Canellos found that less than 10% of 118 consecutive patients with CML presented with extramedullary myeloblastic tumours of lymph nodes, bone or skin. These extramedullary manifestations often coincide with an accelerated phase of the disease or blast crises, and blastic transformation may originate in these sites before occurring in the bone marrow.3,4,6 Pleural involvement in CML has only rarely been documented.7-9 We wish to report a patient with CML who developed a massive pleural effusion due to leukaemic involvement.

#### Department of Medicine, University of the Witwatersrand and Baragwanath Hospital, Johannesburg

R. J. JACOBSON, M.B. B.CH., F.R.C.P. (c.) (Present address: Department of Medicine, Division of Hematology, Georgetown University Hospital, Washington, DC, USA)

H. J. JACOBSON, B.Sc., M.B. B.CH. (Present address: Department of Medicine, Georgetown University Hospital, Washington, DC, USA)

D. P. DERMAN, B.SC., M.B., F.C.P. (S.A.)

Date received: 20 May 1977.

### CASE REPORT

A 34-year-old Black man was admitted to Baragwanath Hospital on 11 October 1974 complaining of weakness and swellings in his neck, axillae, and inguinal regions of 3 weeks' duration. He also had intermittent abdominal pain, he vomited after meals and had lost weight during the preceding month. In the week before his admission he had had epistaxis and noticed blood in his stools.

On examination, he had gross bilateral cervical, supraclavicular, axillary and inguinal lymphadenopathy. The lymph nodes were matted together and were non-tender. The spleen was palpable 10 cm below the left costal margin and extended to the umbilicus. A firm liver edge was palpable 8 cm below the right costal margin. There was no ascites. The cardiovascular and chest examinations were

Laboratory investigations, shown in Table I, revealed peripheral blood and bone marrow findings consistent with CML. The peripheral blood leucocyte count was 410 000/  $\mu$ l and 3% of the cells were myeloblasts. The bone marrow aspirate revealed active myelopoiesis with an increase in the more immature forms, and about 5% of the cells were myeloblasts. No organisms were cultured from the bone marrow aspirate. Chromosome analysis of bone marrow cells revealed the Philadelphia (Ph1) chromosome. A chest radiograph (Fig. 1.) showed moderate hilar lymphadenopathy, but was otherwise normal. Lymph node biopsy specimens, obtained from the right axilla, revealed myeloblastic infiltration. No evidence of tuberculosis was found. Treatment with busulphan (6 mg/d) and allopurinol (300 mg/d) was started and the patient was discharged from hospital on 5 November 1974. He was seen every 2 weeks as an outpatient and on 10 December 1974 the haemoglobin level was 8,0 gm/100 ml and leucocyte count 18 000/µl, with 2% blast cells (Table I). The busulphan was