service perform important duties at the clinic, in the home, and sometimes in the hospital. It would be unfortunate if, in a matter which is confessedly difficult and even delicate, we should through lack of the spirit of conciliation and statesmanship fail in our effort to reach the aim accepted by us all as the ultimate desideratum—the unbroken continuity and singleness of control of the woman throughout the whole of her time of pregnancy, labour, and puerperium.

Conclusion

The scheme here put forward does not claim to present more than an outline of the administrative adjustments required to give it effect. It may be objected that by placing the immediate administrative responsibility for the maternity area on the hospital specialist or the university professor in his dual capacity as an officer of the board and local authority it throws upon him heavy duties which may conflict with those he has to carry out for his board, school, or hospital. It is, however, implicit in the argument which I have adduced above that the wider functions which he should rightly be expected to carry out in relation to public health and, in the case of the professor, to teaching and research can find their full expression only by such means. At the same time it is clear that much of the administrative day-to-day detail would inevitably fall to be performed by officers specially deputed for the purpose.

It would be implicit in the scheme, also, that a maternity and child-welfare committee of each area with representatives from board (regional or board of governors), local authority, and executive council would be set up to initiate and guide policy.

REFERENCES

- Maternity in Great Britain* (1948). Oxford Univ. Press.
Practitioner (1949). *The National Health Service Act in Great Britain*. London.
 Report of the Working Party on Midwives (1948). H.M. Stationery Office, London.
 Report on a National Maternity Service (1944). Royal College of Obstetricians and Gynaecologists. London.
 Young, J. (1943). *Edinb. med. J.*, **50**, 474.

THE PSYCHOLOGY OF THE SURGICAL PATIENT*

BY

ALEXANDER KENNEDY, M.D., F.R.C.P., D.P.M.

Professor of Psychological Medicine, University of Durham

It is characteristic of the mature surgeon not only that his management of a case is based on a sound knowledge of pathology but that his clinical experience has given him an empirical but none the less valuable understanding of human nature. It is because he has taken into consideration all the factors—surgical, pathological, and human—which may affect the outcome that he sometimes obtains a better functional result than a junior colleague whose theoretical knowledge and operative technique are more polished than his own. In diagnosis and in preparatory and post-operative treatment he has learned to think of the patient as a functioning unit in which each component makes its contribution, however indirect, to the health of the whole.

Mind and body are interdependent, and when any serious surgical procedure is contemplated the patient's attitude to his disability must always be considered, and its probable

effect on the outcome. For if psychological factors do not demonstrably affect the leucocyte response or the speed of bony union they can undoubtedly augment or destroy the will to live through severe shock or prolonged sepsis. They may influence profoundly the patient's keenness to regain normal muscular function when the plaster is removed from a fractured limb. No surgeon will embark on a prostatectomy without a careful assessment of renal function, and this may have to be improved before the main operation is performed. In the same way no reparative procedure requiring the patient's co-operation in the rehabilitation phase should be undertaken until his willingness and competence to give that co-operation have been estimated. A few bedside inquiries about his attitude to treatment both in the past and at the moment are usually enough. Evidence of poor function in this respect may well be a contraindication to surgery or may call for pre-operative adjustment. If he is to inspire confidence, the surgeon's attitude to his patient must be one of interest and understanding combined with a certain healthy detachment. There is no reason why the making of a few inquiries about the patient's life and personal problems need disturb this relationship.

It is permissible to those in charge of patients with psychiatric disorders to carry out first-aid when it is needed, or even a little minor surgery. In the same way the treatment of transient unhappiness, ungrounded fear, uncertainty, and laziness are the legitimate concern of the surgeon. Their pathological counterparts, depression and anxiety, however, need expert assessment. There is usually little difficulty in distinguishing between the passing gloom, discontent, or worry which is part of the average man's attitude to life, and the irrationally gloomy view of the depressive or the persistent tension of the anxiety state. Such cases are beyond the scope of psychiatric first-aid.

The Patient's Viewpoint

Patients are far more impressed by what the surgeon says to them, by how much he hurts them, and by how much he appears to understand their individual difficulties than by the most skilful arts he can practise on their unconscious bodies. Few can understand the rationale of their treatment, and the comprehension which they lack must be replaced by confidence in those who are caring for them. If too much is not to be asked of this faith the patient should be told in simple terms why he is having the treatment and what he may expect from it. He will want to know if his condition is dangerous, if it is likely to lead to disablement, roughly how long it will last, and whether he is to expect any discomfort. While enough must be said to counter the often too-justifiable criticism, "They don't tell you anything," care must be taken not to convey dangerous knowledge. If ignorance is to be relieved it must be in terms which the patient can understand and is not likely to misinterpret. Given a little information he will be protected from rumours and false information obtained from his anxious inquiries of other patients. Beyond this, if the surgeon can demonstrate that he appreciates his minor difficulties and discomforts and if he can be made to feel that he is being treated as an individual rather than as a case, little more is necessary.

A major operation is a landmark in the patient's life, a point of reference from which events will be measured in time. The surgical intricacies and hazards mean little to him except in terms of hours spent in the theatre or the length of the skin incision. Since he puts his faith in the surgeon and his craft the excursion into the unknown which the operation entails acquires a magical quality. Once

*A postgraduate lecture given, by invitation of the Post-Graduate Medical Committee of the University of Sydney, at the Stawell Hall of the Royal Australasian College of Physicians on October 10, 1949.

committed to it he must believe in it as something which will, in return for a sacrifice on his part, relieve him of his troubles. One has only to note the subjective relief following an exploratory laparotomy for carcinoma of the stomach to realize the suggestive value of the ritual of a major operation. The patient's faith in the surgeon is that of a man who has no comfortable alternative to blind faith, and is illustrated by the way he will reinforce his belief by glorifying the operator in his conversation and interpreting his most trivial sayings as those of the man of steel he inwardly hopes him to be. The strong emotions involved in this relationship are of positive value in eliciting the patient's co-operation. It follows that the one way to bring about a negative attitude is to reveal lack of personal interest.

The average patient can, and sometimes has to, tolerate minor psychological traumata during his stay in hospital. He may have to lie, atropine-dry, outside the theatre door, only to be told that his operation has been postponed. A patient admitted with apparently similar symptoms may die in the next bed, or the words, "I am not going to hurt you," may be followed by an experience which shatters his faith in such assurances for all time. None of these incidents leaves any permanent effect on the majority of patients, but there are circumstances in which the psychological handling of a case may make all the difference to the functional result. Such moments may occur when the patient is critically ill or when his morale has been lowered by prolonged sepsis and the will to live is failing, when a series of operations is necessary, when pain cannot be avoided, or where the patient must be immobilized for long periods. When a discouraging disability has to be faced, such as blindness, paraplegia, or the loss of a limb, the method of revealing this to the patient requires great care. Only by finding an approach adapted to the kind of man who has to face the facts and by using it at an opportune moment can morale be maintained at its highest and with it the will to co-operate in re-educative treatment.

In determining the best way to tell a patient about his illness the three main variables are his intelligence, the degree to which he is a realist, and the extent to which he is prepared to trust the details to the surgeon. If the dull-witted man is trusting he will be less puzzled by his unfamiliar surroundings, and minimal reassurance will be necessary. If he is not prepared to leave the thinking to others he will begin to speculate about his bodily functions and their future. It is difficult for a medical man to realize how crude are the average citizen's conceptions of his own interior. Many have had to found their ideas on butchery, fiction, occasional first-aid talks, and, most important of all, advertisements for patent medicines. Each organ is often connected with some advertising slogan about an alarming disorder and is rarely thought of in terms of normal function. For this reason the greatest care has to be taken in using medical terminology lest it clash with the perverted nomenclature of hearsay and commerce. In this connexion the use of the word "chronic" is particularly misleading.

Cases of Poor Prognosis

Although the majority of patients are realists, the non-pathological mental mechanism of non-realization will come into play in many cases where the fact of disability or shortened life has to be feared. Relatively few patients with malignant disease ask, "Is it cancer?" unless they expect a negative answer, and it is the demonstrative neurotic and the hypochondriac who most often put this question. The intelligent patient with a neoplasm usually has a half-conscious suspicion of the truth, but he allows

his attention to wander conveniently from the subject and may not wish to court an unfavourable reply by asking the question. In this case, unless he is failing to take his treatment seriously, the matter need not come up for discussion, at any rate with the patient himself. In the case of stable and intelligent men who must adjust their affairs and who prefer a realistic discussion to the anxieties of procrastination and uncertainty, frank discussion rarely causes more than a temporary depression. Suicide in such cases is rare indeed. It is the depressive who irrationally imagines he has cancer who is more likely to take his life.

In speaking to patients with a bad prognosis two principles are important: first, that it is rarely possible to practise deceit successfully on a patient for any length of time unless he himself half-consciously wishes to be deceived. Secondly, a prognosis in which there is a faint ray of hope—a light at the end of the tunnel, however dim, on which the patient can fix his hopes—is so much better for the patient's morale than an inactive pessimism that the latter, in fact, is rarely justified, unless it is to make him put his affairs in order in the interests of his family.

Hospital Routine—Sleep

Admission to a nursing-home or hospital ward involves for most patients translation into a world where almost every detail of daily routine is different from that to which they are accustomed. By the time the lights go down the new patient may find himself with an empty stomach, ripe for conversation, without privacy, and with a full bladder which can be relieved only by making himself conspicuous. He may have to suffer for fear that his personal needs may be expressed in unacceptable language. Even the comfort of pitch darkness may be denied him. By the time middle age is reached the onset of sleep is often hedged about by a variety of conditioned reflexes for which the appropriate stimuli are now suddenly and entirely lacking. The "good night" formula is missed, the hot bath or hot drink, the bedside book, the last cigarette, the accustomed pillow—each sensation which in ritual order contributes to the spread of inhibition in a nervous system healthily tired by the efforts of the day. Appreciation of these difficulties will help the patient materially to adapt himself to his new surroundings.

If a sedative is used it must be in order to initiate a new routine rather than to become a part of one. For this reason adequate dosage of a quickly acting drug given early is preferable to the belated dose which is so often given at an unnatural hour. In a small number of patients the establishment of a sleep routine is a major problem, and systematic inquiry has to be made to find out wherein the difficulty lies. The most trivial concession to the patient's personal habits may make all the difference. Where the patient is worried about the effects of his condition on his job or his family, means must be sought by which these anxieties can be allayed. They are as much a complication of the illness as sepsis or a pressure-sore, and may have as much effect on the outcome. If practical reassurance is not possible and anxiety persists, it may be kept in check during active surgical treatment by sedatives taken regularly for a planned period. If it fails to respond to such treatment psychiatric aid should be sought early rather than late.

Long-stay Cases

The management of patients who are in hospital for a long period requires great care not only because of the inevitable fluctuations of morale which occur but because of their tendency to become dependent and even child-like in relation to their attendants. Often this tendency is not

discouraged by the nursing staff. While trust and dependence are necessary in the acute stage of an illness, rehabilitation and the assumption of responsibilities with a view to return to normal life should begin as soon as the patient is physically well enough. A constant goal of return to normal responsibilities must be held out lest the patient becomes content with the dependence of the chronic invalid. The discomforts of a prolonged stay in hospital are better tolerated if it is evident that the surgeon knows of them and gives credit for them, but firmness is sometimes required if the patient becomes too exacting of sympathy. The value of purposeful occupation in these patients cannot be overestimated.

Where a permanent disability has to be feared there is no point in concealing a fact which must inevitably come out, and the patient must be allowed to find out about his future as soon as he is fit to do so, in order that he can begin his adaptation to it while still in a protected hospital environment.

Effects of Drugs

When use is made of drugs which may cause temporary depression it is important to appreciate the patient's feelings. Sulphapyridine and emetine are good examples. When the patient is seen to be expressionless and gloomy, the fact should be remarked upon and the cause and temporary nature of the gloomy mood explained to him. Otherwise he may easily think that some permanent change has come upon him and fear that he is becoming insane. In a patient liable to depression these drugs may cause suicidal thoughts, but if he is reassured that he will sleep and feel normal in a few days little harm is done. It is to be noted that alcohol usually makes this type of pharmacogenic depression worse and that amphetamine may cause severe agitation if used in an attempt to correct it.

Another mental state for which allowances must be made occurs in a certain proportion of patients who are premedicated with morphine and hyoscine. Here mistakes are more often made by theatre staff than by the surgeon himself. The patient must be left as quiet as possible, and normal conversation is not to be expected of him. He is often without sense of time, and amnesia after the event is quite frequent. Such a patient should never be asked to decide any question or given any instructions to be carried out later on, and the mention of relatives or children or other delicate material may produce an emotional outburst of which he may afterwards be ashamed. The fact that he is conscious must be recognized, as he may be disinclined to move, but he should not be allowed to do anything for himself. If a local analgesic is being used it is important to explain in a general way what is being done and when each step is about to begin. The patient need not be encouraged to answer lest he become talkative, but it must be remembered that, although pain is not felt, the sensation of something being done is alarming in the absence of some sort of explanation and reassurance. While a great deal of this minor psychological care is carried out by the nurses if they are well trained, it is essential that the surgeon assure himself that his staff are well mannered and considerate in this respect.

In the post-operative period the daily call at the bedside may not be of long duration. For the patient, however, it is an important moment and his opportunity to mention matters about which he is not at ease. On these occasions the house-officers or nurses may often wish to save time by doing his talking for him. The fact that some direct interchange takes place between patient and surgeon on each of these occasions is an essential part of their relationship. While there is no need to take long, the surgeon

should if possible convey the fact that he is aware of the patient's viewpoint and that he has not lost interest. On these occasions the patient may mention symptoms such as hiccup, heartburn, or dry tongue, which may appear to him unworthy of complaint. These conditions may nevertheless cause great distress in a bedridden patient, and successful treatment of them will do much to increase confidence. Experience alone teaches ways of dealing with the talkative patient, but it is a sound rule to remember that an early escape leaves behind no more disappointment than a late one.

Pain

It is not often necessary for a patient to suffer severe pain. In acute pain of recent onset, where diagnosis is certain and it is known that the cause will soon be removed, there need be no hesitation in giving analgesics in adequate amounts. If, however, there is danger that a dulling of the patient's senses may render him unable to appreciate and describe his symptoms, caution must be exercised during the period of observation. In non-severe pain the use of the milder analgesics has no dangers provided that they are discontinued the moment the pain has gone. There is a tendency in surgical wards for this kind of drug, once it has been prescribed, to be accepted without protest by the patient even when not in pain, lest if he refuse it there will be none available should the pain return.

The number of mild analgesics is small, but their combinations, pharmacopoeial and proprietary, are legion. With the latter, it is better to know the content of a tablet or capsule than to be gulled by the neologisms of the descriptive literature. Aspirin, amidopyrine, and phenacetin are analgesics the effects of which are enhanced by efficient combination with each other, with barbiturates, and with small doses of codeine. Though safe enough, they are not, however, effective against severe pain, and it must be remembered that any drug, natural or synthetic, which will relieve severe pain is also potentially habit-forming. The period during which morphine derivatives and their synthetic analogues may be given without danger in this respect varies with the personality of the patient and the degree to which he has been rendered vulnerable to addiction by continued pain, exhaustion, or worry. It is difficult to make an addict of the average Briton, but if any drug of the morphine group is given often enough not only will tolerance be established, necessitating increased dosage, but withdrawal symptoms, including increased sensitivity to pain, will appear if it is discontinued.

In certain vulnerable personalities in whom pleasurable sensations are produced by the drug as well as analgesia, addiction may be established very rapidly indeed. If morphine is given more than occasionally for trigeminal neuralgia, for instance, it must be only as a preliminary to alcohol injection or root resection. If it is given in sciatic pain due to malignant disease, and cordotomy is not feasible, it may be necessary to continue in increasing doses until the patient's death. Addiction is of little importance in the patient where the end is in sight, but tolerance to the only drugs which are really effective against pain is disastrous. Since it may take less than six months for a patient to reach a point when 15 gr. (1 g.) of morphine daily will have relatively little effect, the importance of using nerve-blocks, sections, and cordotomies at an early stage is evident. If they are carried out only after a long period under analgesics they will have no effect on the addiction and the drugs will have to be continued.

In continual or recurrent pain much of the suffering is due to anticipation of future pain, either at the next attack or when the analgesic has worn off. This anxiety

may require treatment by means of barbiturates if the patient is to get enough sleep, but care must be taken to choose those which are least likely to cause confusion when taken over a long period. Where other measures have failed, in such conditions as malignant disease of the jaw or skull, prefrontal leucotomy will in successful cases remove the dread of future pain and allow the patient, while still feeling the pain, to be indifferent to it, to gain weight, and to adopt a mildly euphoric attitude towards his future.

Psychiatric Emergencies in Surgical Cases

From time to time the stress of illness and its surgical treatment acts as the precipitating factor of an acute psychological disturbance. The aged are especially vulnerable, and those concerned with the treatment of cataract are used to dealing with states of confusion and agitation occurring in the week following operation. Few of such patients are transferred to mental hospitals, because ophthalmologists are aware that with kindly and efficient nursing the patients are likely to recover completely and that such a transfer might jeopardize the success of the operation. It can safely be said that by far the greater number of acute psychiatric emergencies occurring in patients in surgical wards are likely to subside with good management within a few hours to a point when at least they do not disturb other patients.

The appearance of mental symptoms may be the signal for seeking expert assistance or for transferring the case to a ward where mental nursing is available, but it is no reason for relaxing the standard of surgical care or exposing the patient to hazard by a removal to another hospital reminiscent of the hasty banishment of the insane in less enlightened days. The greater number of psychotic episodes occurring in surgical wards are toxic in origin. While shock, sepsis, and metabolic change may be the cause of confusional states, drugs also often enter into the aetiology. The unstable patient who makes heavy weather of his discomforts may, as the result of injudicious sedation, become muddled and inclined to wander out of bed, especially if poor renal function, exhaustion, or sepsis increase the tendency to nocturnal delirium. Drug idiosyncrasies and post-operative excitement due to the release effect of narcotics given in association with anaesthesia are not usually difficult to recognize for what they are. Here again a few hours' patience may see the condition subside.

From time to time acute anxiety, panic, or hysterical behaviour may be seen in patients for whom the psychological strain of illness is too great. Incidents of this kind are seen where a series of operations must be performed, where a patient realizes that his patience and suffering are not going to be rewarded by recovery, or where it is becoming evident that pain cannot be fully controlled. The majority of these are episodic, and the condition subsides if the patient is listened to and reassured. If normal mental defence mechanisms do not then come into operation by which the patient ceases fully to realize his situation his will to live may rapidly decline. The house-surgeon who really knows his patients can do much to prevent such episodes, and time spent at the bedside at a critical moment may give the encouragement which is all that is needed to restore the patient's morale. Experience of such situations is a most important part of his training.

Interpretation of Symptoms

In surgical diagnosis it is not always possible to be guided entirely by the results of objective examination, and some reliance has to be placed on the symptoms as the patient describes them. Quite a number of patients minimize their

pain or disability to an extent which renders diagnosis difficult. A man in first-class physical condition and keen to be back at work may during the examination ignore his pain to such an extent that the surgeon may be led, after a cursory examination, to be satisfied that the damage is slight. The convention of understatement can be carried to great lengths by patients whose morale is high, and the amount of suffering which they will endure rather than risk a reproof for needless complaint may be very great indeed.

There is no criterion of bearable pain. Tight plasters and haemorrhage in wounds may be revealed too late because the patient does not wish to be a nuisance to an overworked nurse or because he fears the ward sister's ridicule. Another cause of minimization is seen in the patient who is reporting symptoms which he fears are indicative of a serious disease but who is so unwilling to face the fact and so eager to receive reassurance that he "forgets" to mention part of what he has noticed. If the effects of this mental mechanism are to be neutralized the patient must be pressed for more information and, if necessary, warned that if there is any condition requiring treatment it is better to treat it early. It is just such a mental process which may cause fatal delay in the diagnosis of malignant disease.

Leaving Well Alone

A certain number of patients who are sent for surgical advice have called attention to the symptoms of which they complain in the hope that this will lead to a ventilation of some other trouble about which they hesitate to take advice direct. Some of those who present themselves with small varicoceles, for instance, are in reality seeking advice and reassurance about their sexual functions, and the varicocele would be unnoticed were it not for their preoccupation with the subject. Explanation and reassurance will often rapidly remove the symptoms and their cause. A patient who asks for a cosmetic operation which seems hardly necessary may reveal when pressed that he thinks everyone is looking at his unusual nose, his bow legs, or his thick lips. Experience shows that it is unwise to operate in a case which would not normally justify surgical intervention and in which the disability is bound up with a pathological mental attitude. Too often the surgeon, hailed at first as a saviour, eventually joins the list of persons by whom the patient believes himself to have been victimized and, in this case, mutilated. The individual in sound mental health has no desire, conscious or otherwise, to have any more to do with the surgeon than is absolutely necessary. In the patient of abnormal personality, however, the principle that the symptoms must be causing real distress if he is willing to have an operation in the hope of relieving them is not always applicable.

The motives underlying a pathological desire to submit to operation are not necessarily buried deep in the unconscious. To the harassed housewife a fortnight in bed following a confinement is heaven, and an operation is a small price to pay for a similar respite. A man about to be married may convince himself that an abdominal pain is due to appendicitis if he is also possessed of grumbling doubts whether he means to go through with the ceremony. In other cases the motive is less clear. The patient may be seeking a magical way out of psychological difficulties which he prefers to face in somatic form, or he may seek in the operation a token suicide or a surrogate mutilation.

The dangers for the surgeon who prefers action to thought are great indeed. Refusal to operate may create difficulties of its own. The surgeon may have to explain away his inaction to the patient. If he then makes an

effort to find out the real cause of the trouble, the patient may resent his questions and may, in any case, decide to go to someone else. Nothing perhaps brings out the best qualities in a mature surgeon more than the decision to leave well alone.

Functional Disabilities in Surgical Practice

No clear dividing line exists between the different forms of functional disability. Criminal malingering is rare in mentally healthy individuals. Simulation and hysteria frequently coexist, and the tendency to malingering may often, in fact, be one of the clinical features of a hysterical psychopathic personality. In the whole group, from minor purposive exaggeration to gross hysteria, the central motive of advantage through illness is the same, though the personality of the patient, the degree of deliberation, and the exciting causes may differ widely. For clinical purposes it is convenient to distinguish between conversion hysteria, the functional superstructure group, and traumatic hysteria, although features of each of these may be found in the same patient.

In conversion hysteria the patient's personal problems have produced in him a state of tension which he is unwilling or unable to bear. He is attempting to solve or suspend his problems for the time being by becoming incapacitated. In acute cases disabilities such as aphonia, paraplegia, and functional paralysis are the most common, and they are difficult to recognize for what they are only when there is a coexistent organic lesion. In less acute cases the patient may base his symptoms on some minor deformity which would not cause him to complain if he did not help his problem by so doing. Many patients with hammer toes, hallux valgus, or varicose veins ask for treatment for motives of this kind, and return of normal function is invariably slow, however great the structural improvement, because their co-operation in post-operative re-education and rehabilitation is half-hearted.

Patients whose will to health was great before admission to hospital will sometimes, while in hospital recovering from an illness or injury, come to realize that the consequences of a rapid recovery are not necessarily pleasant. Recovery is retarded, and a superstructure of functional disability makes its appearance. This is particularly common where there is any ambiguity in diagnosis or where the patient is able to take advantage of situations in which improvement has to be judged largely by his own reports. Nerve injuries are the best example of this, and the combination of organic paralysis and anaesthesia with functional additions and perpetuations is fairly frequent.

When a minor injury is followed by an overlay so extensive that the organic disability is by comparison trivial, the case has assumed the characters of a traumatic hysteria. In cases of this kind the diagnosis is made not so much from the physical signs as by the patient's attitude to his symptoms. The most characteristic features are the indifferent or "take it or leave it" manner of presenting the disability and the coexistence of other nervous symptoms, such as headache, lack of concentration, and insomnia. Hysteria is to be distinguished from simulation by its negative character. The hysteric has drifted into believing that he has more disability than is present because his morale is such that he lacks the urge to make a positive effort to prevent himself from doing so.

Effects of Negotiations for Compensation

Once the initial excitement associated with an accident has died down and any element of danger to life has passed, the patient has time while in hospital to think of other

aspects of his injury. In order to obtain his rights in the matter of compensation it is necessary for him to demonstrate that he is incapacitated in some way, and he is not always sure that the surgeon will represent his case in the most favourable light from this standpoint. Among industrial workers the Ministry, corporation, or insurance company who pays compensation is often regarded as engaging in a sporting contest with the employees' representatives and solicitors, and the patient feels an obligation to give his side all the support he can. Even in the absence of a desire for a short holiday with pay or of conscious desire to misrepresent the extent of permanent disability, the injured may feel, after a week or two in hospital and a visit from a solicitor, that it would be unwise to claim that he has made a complete recovery before he is absolutely certain of it. This element of caution may conflict with the desire to return to normality as quickly as possible, and surgeon and lawyer may have conflicting interests in their desire to bring the case to a successful conclusion. It is essential that the patient should have as little to do with these negotiations as possible, and that his rehabilitation-morale should not be lowered by too much discussion of his case with visiting workmates.

In individuals with a predisposition to neurosis who have previously been well adjusted in suitable employment, the neurotic pattern of response can sometimes be facilitated by involvement in a compensation case to such an extent that the problem of their rehabilitation becomes almost entirely a psychological one. The surgeon should be fully aware of these possibilities, and a few words in the course of an examination may stiffen the patient's resistance to the unconscious temptation to exaggerate symptoms and to withhold co-operation in physiotherapy. Prevention is far easier than the treatment of the established condition. It is important that expert aid be called for before the process has advanced too far. Exact diagnosis, absence of delay, and ambiguity, together with a show of firmness when it is felt that the patient is not giving the fullest co-operation, are the best means of prevention.

In the period during which the patient's attitude to his illness is being formed he will be greatly influenced by everyone with whom he comes in contact. For this reason the maintenance of a high morale, especially in orthopaedic wards, is of direct concern to the surgeon. The commencement of rehabilitation and occupational therapy at the earliest possible moment will leave little time for idleness and grumbling, and will create an atmosphere in which the potential hysteric cannot flourish.

Conclusion

It is probable that temperament has at least as much to do with the choice of surgery as a profession as has technical aptitude, and it may be for this reason that it is in the surgical wards that the human approach is sometimes less in evidence than elsewhere. The purpose of this article is not to add anything new but to draw attention to the fact that modern surgery is a descendant of the Hippocratic art and that "it is the duty of the healer not only to do that which immediately behoves him, but to secure the co-operation of the patient, of those in attendance, and of all external agents."

Major-General Malcolm C. Grow, Surgeon General of the United States Air Force, retired on November 30 after more than 31 years' service. He was succeeded by the Deputy Surgeon General, Major-General Harry G. Armstrong. General Grow was a pioneer in the development of airborne medical equipment and of body armour.