But he was apprehensive because he knew that his three brothers suffered from anginal symptoms. I could find nothing wrong—heart normal, rate 88 per minute, systolic blood pressure 150 mm. Hg; but in view of the family history I cautioned him against excessive effort. In November, 1920, eleven months later, he had two terrible attacks of angina. He is still alive and feels in excellent health, and he has had no severe pain since November, 1920, but he has "reminders" if he hurries or is hurried. "A form of acute indigestion, if you understand me," was his description, the pain being substernal, about the level of the nipples. It passes away at once if he stands still.

(4) The fourth brother is 61 years old. He has not consulted me, but his doctor tells me that for five years he has suffered from anginal pain in the left arm, and in the beginning of June last he had a severe attack.

This is a remarkable series. The earliest symptoms were of significance, also the sense of oppression caused by walking, the sensation of something too big for the chest, the pain about the angle of the scapula labelled "indigestion," the epigastric pain brought on by effort, and in one of the four the dramatic and fatal major attack preceded for seven years by varying manifestations of angina minor.

I have attempted to review our position when faced by patients suffering from angina who ask to be told what the future holds for them. I have tried to discover where help and guidance are to be found in estimating the mortality, knowing only too well that there can be no certainty about the outlook. It is admittedly brighter, however, in proportion to the degree of sensitiveness of the central nervous system, and becomes correspondingly graver when evidence is obtained indicating disease or degeneration of the myocardium.

The electro-cardiograph yields informative evidence of this nature, and it is found that the mortality in a series of patients is higher when certain well defined deviations from the normal electro-cardiogram are present.

Again, prognosis is often at fault because the significance of some of the slight and earlier manifestations are misinterpreted. These minor anginas have certain characteristics which should enable them to be recognized for what they are—symptoms often unobtrusive, yet significant and only yielding up their secret to careful cross-examination. They may be compared to a gesture, slight but ominous, and full of menace.

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INJURY TO THE SPLEEN: DELAYED HAEMORRHAGE.

BY

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THE following case has seemed to us worthy of placing on record on account of the unusual features which it presented.

History.

The patient, Mr. S., a powerfully built man of 23, was returning home on his motor cycle about midnight on September 5th, 1923, when he met with an accident. Exactly what happened the patient himself could not tell, but he thinks that his lamp went out, that his machine struck a bank at the side of the road, and that he was heavily thrown. He managed to crawl to a neighbouring house, where he was kept till the following morning, when he was conveyed to his lodgings about twelve miles away. He was seen shortly after his arrival by C. R. T., and though he was apparently quite conscious at that time, the patient stated that his mind was an absolute blank from the moment of the accident until the following afternoon. A careful examination by C. R. T. failed to reveal anything more than severe bruising of the back, chiefly in the neighbourhood of the left iliac crest. After examination he walked to his father's house, some hundreds of yards away. He was kept in bed and visited daily and there seemed to be very little the matter with him.

At 1 a.m. on September 9th, in response to an urgent summons, C. R. T. visited him and found him suffering from very severe abdominal pain; pulse 120, temperature 101°. The abdomen was greatly distended. The bowels had not acted since before the

accident, but flatus had been freely passed. A soap enema yielded no result. He was seen again at 9.30 a.m., when the pulse had fallen to 104 and the temperature was 102°; he was easier, but as the bowels had not yet acted it was thought advisable to send him to the Lloyd Hospital, Bridlington. He walked downstairs to the cab, and on reaching the hospital walked to the ward. A soap enema was given immediately after his arrival, and a perfectly colossal evacuation resulted. He was seen again in the evening and found to be quite comfortable and both pulse and temperature were settling satisfactorily. On September 10th he was quite well and comfortable, and in the evening a dose of castor oil was given.

The following morning, September 11th, he appeared to be in particularly good spirits, joking with the nurses and asking for more food. About 9.30 a.m. he was seated on the bed-pan when he suddenly collapsed into the bed, the radial pulses vanished, and his face assumed an ashen hue. He was seen (for the first time since the accident) by C. J. G. T. at about 10.15 a.m. He was then in a state of profound collapse, his extremities were cold, his colour ghastly, and no pulse could be felt; the lips were blanched, but he was not restless. There was no distension of the abdomen, no tenderness, no local or general rigidity, and no dullness in the flanks, but liver dullness was completely absent. There were no abnormal signs in the chest. It was thought that internal haemorrhage might be taking place, but there were no signs to indicate where. In any case he seemed to be dying, and the giving of an anaesthetic as he then was was entirely out of the question. The foot of the bed was elevated, but in view of the possibility of bleeding salines were not given. He was seen by C. R. T. at 12.15 p.m.; his pulse was then palpable (92), but the colour was still very bad; he was not at all restless and there were no abdominal signs. At 1.15 p.m. the pulse was 84; there was acute tenderness and board-like rigidity of the epigastrium. Liver dullness was still absent. As a history of "indigestion and flatulence" had been volunteered by a relative, a tentative diagnosis of perforation of a duodenal or gastric ulcer was made. C. R. T. and C. J. G. T. saw him together at 2.15 p.m., when his general condition was substantially the same, but he was now extremely restless, almost violent, rolling about the bed, groaning and complaining of acute abdominal pain. It was impossible to examine him at all carefully as he would not lie still for a moment, seeming to find greatest relief when lying curled up on his right side. He was still in a state of extreme shock. In view of the circumstances it was agreed that laparotomy offered the only, though an exceedingly slender, hope of recovery. The extreme epigastric rigidity and tenderness with loss of liver dullness appeared to justify a diagnosis of perforation of the bowel in the upper abdomen, probably either duodenum or stomach, though we were completely at a loss to account for the very prolonged stage of shock.

Operation.

The abdomen was opened at 4 p.m. by C. J. G. T., assisted by C. R. T. The anaesthetic, CE₂, and open ether, was administered by Dr. H. J. S. Morton. The incision was made through the right upper rectus, but as soon as the peritoneum was exposed it was clear from the dark discoloration beneath it that a considerable haemorrhage within the abdomen had occurred. There was a great rush of blood when the parietal peritoneum was divided. This was hastily mopped away and a rapid examination of the stomach, duodenum, liver, colon, and mesenteries showed that the origin of the bleeding was not in any of these organs; it then became evident that the blood was passing upwards and forwards from the left hypochondrium. The spleen was palpated and a rent on the posterior surface at the lower pole was felt. The original incision was accordingly closed in layers as quickly as possible and, speed being now absolutely essential, the splenic region was approached through a subcostal incision parallel with the costal margin, the muscles being cut right across and no attempt made to separate their fibres anatomically. No difficulty was experienced in delivering the spleen into the wound, and the tear could then be seen, resembling a deep puncture measuring about half an inch in diameter and extending for about one inch into the pulp of the organ. As soon as clamps had been applied to the pedicle intravenous infusion of saline into the left arm was commenced by C. R. T. and continued until the operation was completed. The spleen was quickly removed, the pedicle securely ligatured, and the wound closed by through-and-through silkworm gut sutures, reinforced by an intermediate continuous layer of strong chromic catgut which included peritoneum, muscle, and aponeurosis.

The Spleen.

On examining the spleen after removal it was seen that, in addition to the tear already referred to, there were two quite extensive linear tears of the lower pole, each of them measuring fully an inch in length, involving the parenchyma of the spleen but not the peritoneal coat. There had been some small amount of bleeding from both of these, stretching the peritoneum but not causing it to give way. The largest tear easily admitted a finger-tip.

Subsequent Progress.

The patient quickly rallied after the operation and the administration of rectal salines, but for some days he was extremely troublesome, throwing himself about in complete abandon, trying to get out of bed, and so on. The abdomen was considerably distended for forty-eight hours, but pituitrin injections and turpentine enemata brought relief, the size of the stool being again a matter of comment. The temperature was irregular for a couple of weeks, but both wounds healed soundly, and he left the hospital exactly four weeks after the operation. A blood count taken the day before he was discharged showed: Haemoglobin 90 per cent., red cells 3,700,000, leucocytes 10,300. Differential count: Polymorphonuclears 69 per cent., lymphocytes 20 per cent., large mononuclears 7 per cent., basophils 1 per cent., eosinophils 3 per cent. There were no abnormal red cells.

COMMENTS.

The case is rather extraordinary on account of the long latent period between the accident and the onset of acute symptoms. In the light of later knowledge it seems possible that the meteorism and acute pain of the early hours of September 9th may have been due to some bleeding taking place, but it could only have been very slight in amount as no obvious signs of internal haemorrhage were caused. The first real signs, and these exceedingly sudden and severe in their onset, were delayed until the morning of September 11th—that is, more than five days after the original injuries were sustained. We have not been able to make any very exhaustive survey of the literature, but certainly none of the well known textbooks of surgery which we have consulted make any mention or give so much as a hint that such a latent period as this may occur after injuries to the spleen.

Our theory—for what it is worth—as to the train of events in the case is as follows: When the accident occurred, the first impact caused a violent blow in an upward direction directly on the lower pole of the spleen. This blow was probably caused by the point of the handlebar driving upwards beneath the ribs. The rider was then shot clear and in his fall sustained those bruises to the back which at

first appeared to be his only hurt. The violent blow to the spleen caused the pulp to tear in the three places found at operation, but did not tear through the peritoneum, which, as it were, acted as a tourniquet to the injured surfaces and prevented anything more than a slight subserous haemorrhage. What determined the sudden violent bleeding on the morning of the sixth day must have been the giving way of the peritoneum over the largest tear; the haemorrhage here had probably been more extensive and the peritoneum thus weakened by stretching. The extra rise of intra-abdominal pressure caused by the act of defaecation may well have brought this about. It is difficult to find any explanation for what happened in the early hours of September 9th, unless there was a very small leak of blood into the general peritoneal cavity sufficient to irritate and set up the enormous distension of the bowel, but quickly sealed off again.

Another interesting point is that the blood nearly all tracked forwards in front of the stomach and colon; very little found its way into the lower abdomen and the pelvis or into the left flank, hence the absence of any noticeable dullness when that point was being investigated. The track of the blood rendered the finding of the bleeding point a great deal more easy, so that this was a very fortunate circumstance.

British Medical Association.

PROCEEDINGS OF SECTIONS AT THE ANNUAL MEETING, 1923.

SECTION OF
NEUROLOGY AND PSYCHOLOGICAL
MEDICINE.

HENRY DEVINE, O.B.E., M.D., F.R.C.P., President.

PRESIDENT'S INTRODUCTORY REMARKS.

THE subjects selected for discussion cover a wide range and on the surface they appear to bear but little relationship to one another. This is not actually so, however, because they are all closely concerned with alterations or abnormalities of behaviour, and they are thus subjects of interest to neurologists, physicians, psychiatrists, and general practitioners. In the first place we shall consider those children, of whom there appear to be an increasing number, who are difficult, awkward, and sensitive; who react to life in an unusual and perplexing way; and who constitute a problem to parents, doctors, and teachers. Then we shall discuss an infective disorder, lethargic encephalitis, which is of peculiar interest and importance because it is liable to be followed by profound alterations in the personality. This subject is closely related to the one which will be discussed to-day, because the mental sequelae of lethargic encephalitis are particularly marked in children and include changes in temperament and moral character, instinct perversion, and dementia praecox-like states. Here it is possible to trace an intimate connexion between demonstrable biological disturbances and changes in behaviour; and this serves to remind us that what we call our "mind" is somehow or another embodied in the cells of our organism, so that when there is some alteration in reactions, attitudes, feelings, or thoughts we should not omit to seek for explanations along objective and biological lines. The last discussion on our programme deals with youth rather than childhood, and consideration will be given to those tragic breakdowns of young people whose lives often seemed so full of promise, and whose mental illness only too frequently ends in permanent and profound deterioration. I now wish to observe that those of us who spend our lives with cases such as these realize that, in many instances, we are not dealing with acute mental illness, but with the ultimate expression of morbid tendencies which have been developing since childhood. As psychiatrists we cannot undo the past, and I am

convinced that it is in childhood that most can be done to prevent these "sensitives" from developing into psychotics during adolescence; it is in childhood that faulty habits of reaction and morbid tendencies stand the greatest chance of correction. It may be that in some instances, we do not know how many, these illnesses are the outcome of a biological inferiority; we should not regard them as inevitable, however, because we do not yet know how much can be done by treating the potential psychotic from early days and directing his life in the most suitable lines. Psychiatry is not the narrow specialty it used to be, and the psychiatrist is no longer compelled to plough a lone furrow or to solve unaided the most obscure problems of medicine. Perhaps we may look on this meeting as the symbol of the changed attitude of the medical profession to psychological medicine, which is now recognized to include the study of all abnormalities of behaviour however trivial they may seem. We have at this meeting a children's physician, a neurologist, and a psychiatrist who will introduce discussions on varying types and varying causes of abnormal behaviour. It is only thus by full and complete co-operation that we shall begin to solve our manifold problems.

DISCUSSION ON THE NERVOUS CHILD.

OPENING PAPER

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It is no easy task to open a discussion upon a subject of which the boundaries are so ill defined. Indeed, I can conceive of only one undertaking which is harder—to bring it to a close—and I understand that both these tasks have fallen to me. A parent, a pedagogue, a priest, a physician, a psychologist will each view the subject differently and raise different issues.

I propose to confine my opening remarks to two aspects of the question. I desire to place before you a description of certain peculiarities of physique and of posture which seem to me very constantly to accompany nervous instability in children. Secondly, I propose to examine briefly the rôle which parental management plays in provoking or controlling the particular abnormalities of conduct for which our advice is sought.

THE PHYSICAL ASPECT OF THE NERVOUS CHILD.

It is not often that good physique, a confident carriage, and a satisfactory circulatory system are found in com-