occurring. The idea of closure was abandoned at that time, now some $2\frac{1}{2}$ years ago, and since then the patient has lived a comfortable life, has been at the University, where he took his degree, played golf, and rode a bicycle, sometimes as far as 40 miles, and has danced. If anything upset him he still passed blood and mucus *per rectum*. He (Mr. Makins) was of opinion that were any attempt made to close the anus more harm than good would ensue, and the patient himself had made up his mind to put up with it. In proposing this operation too much weight should not be attached to the probability that the artificial anus was to be temporary only; if that were done the patients naturally began to worry and ask for the opening to be closed, and yet the closure might be inadvisable or impossible. If patients insisted and the attempt were made, it might end in recurrence of the symptoms, or even worse. Of the six cases he had mentioned as having been treated by colostomy, one died. The fatal case was one of very severe and extensive ulceration, and the patient died on the twenty-third day after the operation.

Dr. HALE WHITE said he thought the account given by Sir William Allchin and the gentlemen who kindly analysed the cases at the various hospitals was so full that but little was left to be said about the disease. He could bear out what Sir William Allchin said about the confusion which existed regarding colitis. It was not uncommon to find membranous colitis spoken of as ulcerative colitis; but those maladies were distinct from each other. The introducer had mentioned that there were many causes of ulceration of the bowel; growth, dysentery, tubercle, typhoid and so forth, but the speaker was surprised not to find mention of instances of vascular ulcers of the intestine. Fifty years ago Wilks and Moxon stated that the intestine was ulcerated in very various conditions, patients dying generally of feeble circulation. He (Dr. White) had seen it, and he did not think it was uncommon to meet with it in the post-mortem room. One such case was given in the series from Guy's. As Sir William said, if the case was to be regarded as ulcerative colitis, there must not be any of the obvious causes of ulceration which were known to all, and the patient must present a definite assemblage of symptoms from which one could predict that after death the colon would be found ulcerated in the way Sir William had described. As our knowledge of the causes of ulceration of the colon widened, the number of cases reported simply as ulcerative colitis would get less. For example, cases due to the pneumococcus

could now be excluded, for it was known that colitis going on to ulceration may occur in the course of pneumonia, and so one learned that the pneumococcus could cause ulceration of the intestine. The same could be said of the cases in which ulcerative conditions of the bowels occurred in the course of septicæmia, of which, happily, few cases were now seen, though the post-mortem records of fifty years ago contained many such cases. Cases occurring in glanders could similarly be marked off. But with regard to the residue of cases which we call ulcerative colitis, as the author said, there was nothing distinctive in the colitis itself. The association of chronic interstitial nephritis with the disease was of great interest—indeed, of historic interest—because if Fellows would look at Bright's original "Tabular view of the Morbid appearances occurring in 100 cases in connexion with Albuminous Urine," one of the fatal cases, viz., No 23, was a very excellent instance of extensive ulceration of the intestine. The figures which had been handed round showed that that association existed, and he supposed we must assume that a person with chronic interstitial nephritis had a lowered resistance in such a direction that the micro-organisms which were the cause of the ulcerative colitis obtained a hold; though it must be remembered that it had been suggested that some of the cases associated with interstitial nephritis were due to hæmorrhages in the course of the intestine. That question was raised many years ago by Sir William Gull.

Much attention would, no doubt, be directed to a discussion of the relationship between ulcerative colitis and dysentery. From the facts that were available, each would form his own opinion according to his interpretation of them. He did not regard the case as proven either way. He had had only a short experience of the tropics, but as far as the dysentery he saw there was concerned, it was unlike ulcerative colitis clinically. And all would admit that the bacteriology of the subject was yet in a very uncertain condition. No bacillus was mentioned in the definition of dysentery in the last edition of Clifford Allbutt's "System of Medicine." The author mentioned the case recorded by Professor Saundby in the *British Medical Journal* as a case in which Shiga's bacillus was said to have been found in ulcerative colitis. But from a correspondence which subsequently appeared in the *British Medical Journal* it seemed that there was much doubt whether the bacillus described was Shiga's bacillus. And none of the cases narrated on the present occasion supported the identity of the two diseases; rather they seemed to separate the two conditions. He

hoped someone with a large experience of asylum dysentery would enlighten the Section, in the course of the discussion, because it was one of the most interesting aspects of the question. Dr. Knobel pointed out that the condition of the nervous system must have something to do with it; for certainly asylum dysentery was far commoner in asylums than was any similar disease in other establishments, so that the cause could not be the mere herding of large numbers together. And the same authority gave instances in which there had been widespread epidemics in new asylums. Possibly the lowered resistance of lunatics might have something to do with it. In the Guy's series got together on the present occasion there were four cases of nervous disease associated with the ulcerative colitis: two of tabes and two of chronic disease of the cord. Considering that in a general hospital post-mortem examinations on patients with diseases of the cord were not frequent, and ulcerative colitis was a rare condition, the association could hardly be a mere coincidence, and many other instances of the association had been described; three or four in the Pathological Society's "Transactions," one by Mr. Targett, and another by Dr. Acland. It was curious that occasionally ulcerative colitis was associated with a single abscess of the liver; but he did not think it ought therefore to be assumed that this was of much value as showing that ulcerative colitis was the same as dysentery, because the more one thought of why a man with dysenteric disease of his intestine should get a solitary abscess of his liver, the more difficult it was to understand. One would have thought that the amœbæ would have been distributed about the liver in such a way as to make multiple abscesses. He believed they were still in the dark about the pathology of single abscesses of the liver. A rare variety of ulcerative colitis was that in which the symptoms of ulcerative colitis were due to the bursting of a hepatic abscess into the bowel. He had known of one or two such cases. He had seen difficulties occur in the recognition of appendicitis from ulcerative colitis, and in the latter condition the appendix was frequently involved. The practical point in connexion with that was, that on no account should the appendix be removed when such a condition as ulcerative colitis was suspected: operation then could scarcely be expected to do good, because it would remove only a small area of the ulceration. Examination *per rectum* of all cases of suspected ulcerative colitis was most important. From his post-mortem experience he could confirm what Mr. Makins said as to the inadvisability of short-circuiting, because frequently the disease reached down to the anus, or the bowel involved was so rotten that no such operation

could be done. His experience of rectal irrigation of any sort had not been very favourable; he had not been able to discover that washing out did those patients very much good, and for that reason he had not done it recently. Nor had he obtained much benefit from drugs. He had been much interested in what Mr. Makins said about opening the ascending colon, and if surgery was demanded in a case, that seemed to be the best operation. He (Dr. Hale White) had very little experience of it, but he could remember one man whose life certainly seemed to have been saved by it. He was so bad that the wound was not closed. That was several years ago. He still had an artificial anus, but was going about perfectly well. For a long time after the operation he suffered much from irritation of the skin owing to the very irritating nature of the fæces. He had had scarcely any experience of opening the appendix for the condition; and Mr. Makins's argument appealed to him very much: that one was hardly likely to get much good from that because the fæces would still pass over the ulcerated surface. It was difficult to decide in any case whether surgery should be undertaken, because mild cases would probably get well, and severe cases would die, whether operated upon or not. Probably there were few conditions in medicine which required greater judgment in estimating whether the time had come for operation. Opening the ascending colon should not be decided upon lightly, because it was not a pleasant thing to have artificial anus on the right side. But he thought he had advanced his knowledge of treatment by the experience of a single year, because in the last twelve months he had had three cases of ulcerative colitis, all of whom had been treated by coli vaccine; they had all been put upon milk which had been soured by a reliable lactic acid preparation, and all were at the present time well. He admitted that the cases were very few, and that sufficient time had not elapsed to know whether the cure was permanent, but as three successive cases had got well on a definite line of treatment, that was sufficient justification for continuing that treatment. The sour milk should be given in large quantities. An adult took three pints a day of it, in addition to his ordinary milk. Of course, the patients were kept in bed, and were fed upon slop diet as well.