

Correspondence.

"Audi alteram partem."

THE MORTALITY AFTER OPERATION FOR STRANGULATED HERNIA.

To the Editors of THE LANCET.

SIRS,—In a leading article on the "Treatment of Gangrenous Hernia," published in *THE LANCET* of May 6th last, you conclude your remarks with the following sentence: "One statement made in the discussion is so remarkable that it deserves special notice. Mr. Bowlby stated that, taking all the operations for strangulated hernia performed in St. Bartholomew's Hospital during the last ten years, they showed a mortality of 40 per cent. It would be interesting to know to what this very high death-rate is to be ascribed." In accordance with your suggestion I beg to give you such further information as is at my command; but, in the first place, I should wish to state here what I stated whilst speaking at the Royal Medical and Chirurgical Society in the discussion on Mr. Kendal Franks' paper and what is duly reported in the proceedings of the Society—namely, that the mortality after operation for strangulated hernia is greatly higher than is generally appreciated and that the general average mortality is probably over 40 per cent. In the sentence I have quoted from your article, it would seem as though St. Bartholomew's Hospital enjoyed an unenviable distinction in this respect. But this is not the case, and in my remarks I specially quoted from figures collected by Mr. James Berry and published by him in the St. Bartholomew's Hospital Reports for 1884. These figures show that in 940 cases treated consecutively in St. Thomas's and Guy's Hospitals as well as in St. Bartholomew's Hospital the mortality was 43¹ per cent., the death-rate being nearly equal in all three of these institutions. I considered that these figures justified the conclusions I drew, and, in further support of them, I would allude to the statement made by Mr. Treves in the discussion on Mr. Lockwood's paper in *THE LANCET* of April 4th, 1891, to the effect that the mortality at the London Hospital after operations on strangulated hernia "was nearly 50 per cent." One may therefore conclude that in the four largest hospitals in London such mortality has been within recent years not less than 40 per cent.; but as some of your readers may prefer actual figures from cases still more recently in St. Bartholomew's Hospital I venture to summarise the results of the past ten years: Femoral hernia, 165 operations, 59 deaths—percentage of deaths, 35·7; inguinal hernia, 104 operations, 30 deaths—percentage of deaths, 28·8; umbilical hernia, 24 operations, 14 deaths—percentage of deaths, 58·8—a total of 293 cases with 103 deaths, showing a general mortality of 35·8 per cent. You will thus see that the results obtained at St. Bartholomew's Hospital are, at any rate, no worse than those obtained at other London hospitals (and it is most probable that in the latter also the latest statistics show further improvement); but I think all surgeons will be indebted to you for calling special attention to such a high mortality, and I am personally much obliged for the prominence you have given to this matter, for if properly appreciated and acted upon one may hope that in the future our results may be greatly improved. You say: "It would be interesting to know to what this high mortality is to be ascribed." In a general way this is easy to answer. The high mortality is to be ascribed to the length of time that has elapsed between the act of strangulation and the operation for its relief. The mortality need not be more than 5 or 10 per cent. Most of the deaths are avoidable. Hardly any patients die from the operation itself. Nearly all who succumb are dying or are fatally injured before the operation can be performed. In cases operated on in the first twelve hours after strangulation the mortality is quite trifling. After three or four days of strangulation the chances of recovery are but small. If it were only more fully realised that the death-rate is such as I have shown it to be, surely hospital surgeons might reasonably expect to have cases sent to them at an earlier date, and this is why I wish to insist on a recognition of the high death-rate and the responsibility incurred by those who advocate even the shortest delay.

¹ Not 44 per cent., as I am reported to have said.

With regard to the more exact causes of death, and after having made a large number of post-mortem examinations in cases of hernia, I would say that peritonitis accounts for only a small minority. When it occurs it is usually the result of perforation of the bowel at the seat of stricture and such perforation may not occur for several days after operation. In a case of my own I have known it to occur on the ninth day. Neither peritonitis nor wound complications account for the high mortality. Most of the deaths are due to exhaustion resulting from compulsory starvation of several days' duration as well as from continuous retching, vomiting and pain. In many cases the post-mortem examination reveals basic pneumonia and distension of the right heart; this is the result, in my opinion, of a distended abdomen causing upward displacement of the diaphragm, and with this is combined difficulty of breathing, due to such displacement and to the loss of abdominal respiratory movements. None of these deaths which are due to exhaustion and congestive pneumonia occur in cases operated on early, and they are all avoidable.

Finally, I would say: Let no one think that in resection of gangrenous intestine there exists an efficient means of dealing with cases in which operation has been very long delayed. I understood from Mr. Franks' admirable paper that the patients who survived the operation of resection were operated on not later than the third day and that those operated on after that time all died. If this be so—and I trust Mr. Franks will correct me if I am in error—there is then no reason to believe that after four or five or more days' delay resection of gut will result in any greatly improved statistics; whilst, on the other hand, it is fortunately a comparatively rare occurrence to find gangrenous intestine before the third day of strangulation, and I cannot doubt that in many of the successful cases the gut resected was not gangrenous in the sense in which the term is commonly used by English surgeons. I do not at all wish to condemn the operation of resection in suitable cases, but, on the other hand, I do wish to point out that too much must not be expected from it and that if patients are left too long unrelieved death is most likely to ensue whatever line of treatment is adopted. The routine performance of resection in all cases of gangrenous gut can only bring the operation into disrepute. I am, Sirs, yours truly,

Manchester-square, May 13th, 1893. ANTHONY A. BOWLBY.

"GLYCOSURIA AND AMMONIACAL FERMENTATION."

To the Editors of THE LANCET.

SIRS,—Under the above heading Dr. Bays, in *THE LANCET* of May 13th, publishes a case of glycosuria in which ammoniacal decomposition of the urine took place in the bladder, and he argues that the case stands in contradiction to a statement made by me in *THE LANCET* of Feb. 25th, to the effect that if a saccharine urine be impregnated with both the ammoniacal ferment and with the lactic ferment the lactic fermentation always gets the upper hand, and the development of the ammoniacal fermentation is thereby prevented. Dr. Bays, however, brings forward no evidence that the lactic ferment had gained entrance into the bladder in his patient. The urine, it is true, was saccharine; but a saccharine urine is as susceptible of the ammoniacal fermentation as any other urine provided the ammoniacal ferment be alone in the field. The real inference in Dr. Bays' case is that the ammoniacal ferment alone had effected an entrance into the bladder and that its action was therefore uncontrolled by any antagonistic ferment. To prove his point Dr. Bays must show that the lactic ferment was also present in the bladder with the ammoniacal ferment. His case, as it stands, in regard to its bearing on my statement is therefore entirely beside the mark.

I am, Sirs, yours truly,
Manchester-square, W., May 15th, 1893. WM. ROBERTS.

"BURIAL OR CREMATION?"

To the Editors of THE LANCET.

SIRS,—As you mention the exception taken at Liverpool that my insistence on the burial of the dead as soon as the rigor mortis has passed off may possibly lead to interment before life is extinct, will you kindly—whilst reminding your readers that the cessation of the rigor mortis is in reality the com-