

the hopeless exploratory laparotomy. Yet in the past, the physician could not be blamed for not turning these cases over to the surgeon, for the reason that the mortality of radical surgical intervention, which means excision of the cancerous area with a generous surrounding portion of the stomach and the involved glands, was so high that few patients dared to risk it. But to-day it is time for the profession to realize that the work of the surgeons during the last forty years, has greatly changed the prospects of suffering from the dread disease. It may even be said in the words of that leader in American surgery, Dr. W. J. Mayo, that "in expert hands the results of the treatment of cancer of the stomach compare favorably with that of cancer of other portions of the body." Early operation in cases suspected, not known, to have cancer of the stomach, together with elaboration of the operative technique, have enabled us to accomplish remarkable results in this malady. If, in this disease, in which we must admit that medical treatment gives absolutely no promise of relief, the surgeon can present even a small percentage of successes, he has accomplished much and it can now be fairly said that stomach resection for cancer has a mortality not greatly higher than other abdominal operative procedures, and gives a fair percentage of cures.

For our knowledge of the operative possibilities of the disease, we are largely indebted to Dr. W. J. and Charles H. Mayo, and I shall quote freely in discussing the subject from Dr. Mayo's paper in the *Journal of the American Medical Association* for April, 1906. The first excision of a cancer of the stomach was performed by Pean in 1879, the first successful operation was by Billroth in 1891. Kocher and Billroth have been the pioneers in this branch of surgery. The

death rate was high, however, and Billroth's mortality at the time of his death was over sixty per cent. Before 1890 the average mortality of British and American surgeons was seventy-six per cent. and after that twenty-eight and five-tenths per cent. In spite of this discouraging mortality, the work has been persisted in, until at length, the operative mortality in competent hands and in suitable cases is not far from ten per cent. The mortality of late cases exhausted by hemorrhage and cachexia will still continue high.

The stomach with its thick walls and abundant blood supply lends itself favourably to operative repair. The blood supply can be tied off by ligating four arteries, just as that of the uterus can. Its thick walls make good holding for stitches and it is much easier to sew and manipulate than is the small intestine. The use of clamps makes it possible to resect the stomach and restore the communication between the remainder of it and the bowel practically without opening its lumen. With proper operating tools and assistants the operation may be clean, bloodless and safe, unless the growth is too extensive or the operation performed on patients weakened by starvation and loss of blood.

Now what are the possibilities of the operation? Mayo reported in his paper above alluded to, 100 resections of the stomach with fourteen deaths, fourteen per cent. In the last sixty-three cases there were six deaths or 9.5 per cent. The statistics of freedom from recurrence are very striking. A large number, of course, were operated upon too recently to be of value in this respect, but at the time his paper was published he had five cases living and well, over three years, or 22.7 per cent. of the eighteen who were operated upon over three years after date of operation. This is truly a remark-