Of 27 patients having pancreatoduodenal resections for carcinoma, eight (30 per cent) survived three years or more.

Of 12 patients followed for five years or more, three show no evidence of recurrence. All had carcinoma of the ampulla of Vater. The longest period a patient was followed was six years and two months.

Pancreatoduodenal resection should be reserved for those patients with favorable lesions.

Carcinoma of the ampulla may be cured by pancreatoduodenal resection.

Carcinoma of the head of the pancreas has not been cured by pancreatoduodenal resection. A more extensive operation, such as total pancreatectomy, should be carried out or resection for this condition should be abandoned.

BIBLIOGRAPHY

- ¹ Whipple, A. O., W. B. Parsons and C. R. Mullins: Treatment of Carcinoma of Ampulla of Vater. Ann. Surg., 102: 763, 1935.
- ² Whipple, A. O.: Discussion of S. C. Harvey and A. W. Oughterson: The Surgery of Carcinoma of the Pancreas and Ampullary Region. Ann. Surg., 115: 1066, 1942.
- ⁸ Orr, T. G.: Pancreaticoduodenectomy for Carcinoma of the Ampulla and Ampullary Region. Surgery, 18: 144, 1945.
- ⁴ Waugh, J. M., and O. T. Clagett: Resection of Duodenum and Head of Pancreas for Carcinoma; Analysis of 30 Cases. Surgery, 20: 224, 1946.
- ⁵ Waugh, J. M.: Radical Resection of Head of Pancreas and Total Pancreatectomy. J. A. M. A., 137: 141, 1948.
- ⁶ Bartlett, M. K.: The Status of Pancreaticoduodenal Resection. Surg. Clin. North America, 27: 1032, 1947.
- 7 Cattell, R. B.: Pancreatoduodenal Resection. New England J. Med., 232: 521, 1945.
- ⁸ Allan, F. N., and S. F. Marshall: The Surgical Treatment of Islet Tumor of the Pancreas with Hyperinsulinism. Surg. Clin. North America, 25: 719, 1945.
- ⁹ Whipple, A. O.: Rationale of Radical Surgery for Cancer of the Pancreas and Ampullary Region. Ann. Surg., 114: 612, 1941.
- ¹⁰ Whipple, A. O.: Observations on Radical Surgery for Lesions of Pancreas. Surg., Gynec. & Obst., 82: 623, 1946.
- ¹¹ Trimble, I. R., J. W. Parsons and C. P. Sherman: One-stage Operation for Cure of Carcinoma of the Ampulla of Vater and Head of Pancreas. Surg., Gynec. & Obst., 73: 711, 1941.
- ¹² Brunschwig, A.: One-stage Pancreatoduodenectomy. Surg., Gynec. & Obst., 77: 581, 1943.
- ¹³ Cattell, R. B.: A Technic for Pancreatoduodenal Resection. Surg. Clin. North America, 28: 761, 1948.
- ¹⁴ Lahey, F. H., and D. C. MacKinnon: Carcinoma of the Pancreas. Surg. Clin. North America, 18: 695, 1038.
- ¹⁵ Cole, W. H.: Personal communication.
- ¹⁶ Wollaeger, E. E., M. W. Comfort, O. T. Clagett and A. Osterberg: Efficiency of Gastrointestinal Tract After Resection of Head of Pancreas. J. A. M. A., 137: 838, 1948.

DISCUSSION.—DR. MALCOM THOMPSON, Louisville, Ky.: One of my medical friends has said that his most fervent prayer is to be delivered from a surgeon who is always talking about his one case. As Doctor Cattell has shown us. follow-up reports of seven years' duration upon cancer of the ampulla of Vater are infrequent, so I will risk my friend's censure and solicit your indulgence by being brief. (slides) This shows a photomicrograph of the specimen, pronounced cancer by two pathologists, one of whom reviewed the slide a few weeks ago.

This shows the method of reconstruction. The patient was in the hospital when Ridgeway Trimble's paper appeared, in the November, 1941 issue of Surgery, Gynecology and Obstetrics. Without the knowledge gained from his paper I am sure I would not have had the confidence to proceed. Our technic was exactly as described by him with minor changes as follows: In attempting to bring the common bile duct into the jejunum through counter incision by grasping the duct with a hemostat, the wall was so fragile that it tore, so two guide sutures were placed in each lateral wall of the duct. These were brought through a small incision into the jejunum on needles. The needles then pierced the jejunal wall a slight distance from the opening and the sutures tied upon the serosal surface. In this manner the common duct was anchored into the jejunum as shown. There was not sufficient duodenohepatic ligament to buttress the area of entrance of the duct into the jejunum, so a small piece of detached omentum was sutured around the junction. Also, there was not sufficient duodenohepatic ligament to suspend the jejunum properly so, a few centimeters distally, it was suspended by two sutures to the edge of the liver to relieve tension upon the sutures anchoring the duct.

The patient was jaundiced for five weeks before operation. One-stage excision was performed on November 7, 1941. You might note the date, for had S. G. & O. been late that month we would have been content with simply a palliative shunt, or perhaps later a second stage excision. He has been well for seven years and at present there are no signs of recurrence.

This color slide shows the opened specimen a few minutes after completion of the operation. As you see it is composed of the distal portion of the stomach, the pylorus and the proximal three-fourths of the duodenum. The tumor, 2 centimeters in diameter, can readily be seen at the ampulla and, posteriorly, there is a portion of the head of the pancreas with a small segment of the common duct.

The fact that this man has gone for seven years without chills or fever, without jaundice, without any major digestive disturbances and with the biliary anastomosis distatto the gastric and no attempt to implant the duct of Wirsung will, I am sure, be of interest to Doctor Cattell and to others of you who by your originality and large experience have contributed so much to treatment of this condition.

DR. RICHARD B. CATTELL, Boston (closing): This is a most excellent result in the case reported by Doctor Thompson, and is a long period of survival in carcinoma of the ampulla. I am sure he is wise in recording this striking result with a seven-year survival, because there are too few long follow-ups in these cases.