

Meeting abstract

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## Pancreatoduodenectomy, fifteen years of experience

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### Background

Pancreatoduodenectomy or Whipple's procedure is still the treatment of choice for periampullary and head of pancreas tumors, as well as distal choledochal neoplasms. The effectiveness of this procedure is related to the clinical stage of the disease, the conditions of the patient in addition to the experience and the skill of the surgical institutional equipment. The objective was to evaluate morbidity and mortality after the accomplishment of Whipple's technique.

### Materials and methods

A retrospective analysis was performed with the database of patients submitted to Whipple's procedure from January 1990 to May 2006 in the Instituto Nacional de Cancerología.

### Results

From 69 patients submitted to surgery, 35 were women (%) and 34 men (%). The average age at the time of diagnosis was 52.8 years (range 18–73). Out of 69 patients 59 had a neoplasm of the biliary tree, finding 23 pancreatic tumors (%), 25 of Vater's ampulla (37.5%) 8 of the duodenum (12.5%) and 3 choledochal tumors (%). We also found two patients with neuroendocrine tumors, four patients with papillary and cystic tumors of the pancreas, one patient with an adenoma of Vater's ampulla and three patients with chronic pancreatitis. In 7 patients pylorus preservation surgery was carried out (10.93%), in the rest classic Whipple was performed (87.5%). Average surgery time was 7 hours and 20 min, with an average bleeding time of 1293 ml (200–6000). The average hospital stay

was 21 days, only 3 patients did not require ICU. Fourteen patients developed abdominal sepsis (18.2%), thirteen suffered respiratory complications (nosocomial pneumonia, pulmonary embolism) (20.31%), nine patients presented biliary fistula (14.06%) and eight more an intestinal fistula (12.5%). Twenty patients received adjuvant treatment for the neoplasm in turn (31.25%). Of 18 patients who developed recurrence of the disease (28.12%), 10 presented local disease. After a median follow up of 18 months, 22 patients are alive (34.37%) 13 of which was alive without evidence of disease. We split the series into two different periods of 7.5 years each. During the first period (January 1990–June 1997) 18 classic Whipple's surgery and one pylorus preservation surgery were performed; we had a morbidity of 52.63% and a mortality of 31.57% (6 patients). During the second period (July 1997–September of the 2005) 44 patients were submitted to classic Whipple and 6 patients to pylorus preservation surgery; with a morbidity of 35.3% (16 patients) and a mortality of 8%.

### Conclusion

Pancreatoduodenectomy is the election procedure for patients with pancreatobiliary tumors. In spite of the advances and variations to the technique, it remains a hazardous procedure. Surgery outcome is importantly related with the greater training and experience of the surgical team as we observed in our series.