

## Palliative surgery for gastric cancer in elderly patients

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**Abstract.** Poor survival rate of elderly patients affected by locally advanced or metastatic gastric cancer is related to primary tumour complications. Bleeding is the most important adverse event, other major complications are gastric outlet obstruction and nutritional deprivation. Rarely the patients will perforate the stomach cancer and there is a sudden end to their life; contamination of the ascites result in a rapid death. Thus, an aggressive approach toward palliation of this condition is resection: in this manner the expected survival is approximately one year. Derivation techniques or endoscopic treatments are applied in those patients whose operative risk is unacceptable; in these cases poor median survival is expected. The aim of this report is to refer about the experience in palliative surgery for gastric cancer in the Department of Geriatric Surgery of the University of Padua.

**Key words:** Palliative, surgery, stomach, cancer, elderly

### Introduction

The benefit of palliative surgery for gastric cancer is still controversial. Two questions are commonly raised: should a resection be performed whenever possible? And what are the survival advantages of resection? Although partial gastrectomy is done commonly for adenocarcinoma of the gastric antrum or distal body, total gastrectomy generally is not regarded as an acceptable palliative procedure. This opinion is related to concerns over increased operative mortality and morbidity, reports of short survival, and poor quality of life in surviving patients. Such considerations, generally accepted for young patients, are particularly emphasized in geriatric surgery. The purpose of this article is to evaluate the effects of palliative surgery for gastric cancer patients in the Department of Geriatric Surgery of the University of Padua: the study was started in 1990 and was closed in 2004 and regarded all patients affected by gastric adenocarcinoma aged 70 or more.

### Material and methods

Patients accrual started in January 1990 and closed in December of 2004. In this period 142 patients affected by locally advanced or metastatic gastric adenocarcinoma (LAMGA) were observed. Other histological types or stump cancers were not included. All patients were 70 or more years old; they were 60 men and 82 women; mean age was 79 (range 70-92). Surgical procedures were total gastrectomy (TG), partial gastrectomy (PR), gastroenterostomy (GES) or other by-pass techniques, exploratory laparotomy only (EL). Reconstruction technique after TG was Roux-en-Y esophagojejunostomy (X-Ray control on the VII postoperative day) and after PR Roux-en-Y gastrojejunostomy. In 9 cases (13%) resection included also others structures (transverse colon 4, spleen 2, spleen + pancreatic tail 1, left liver 2). The classification was based on TNM and all patients included were III or IV stage disease (the liver was the most frequent site of distant metastases).

**Table 1.** Type of treatment in 142 patients undergoing palliative treatment for LAMGA

Resectional surgery	69 (48.6%)
Total gastrectomy	30
Partial gastrectomy	39
Nonresectional procedures	58 (40.9%)
By-pass (GES or others)	26
Endoscopic tubes	4
Exploratory laparotomy	28
No operations	15 (10.5%)

**Table 2.** Complications in resected patients for LAMGA

	TG	PR
Cardiovascular	5	4
Pulmonary	3	3
Sepsis	3	4
Wound infection	3	3
Other*	5	6
Total	19 (63%)	20 (51%)

\* Includes renal failure, leakage, pancreatitis, hemorrhage, thrombophlebitis, bowel obstruction

## Results

Table 1 shows the type of treatment and table 2 the complication in resected patients.

Mortality rate (deaths that occurred in the postoperative period directly related to the operation) was 16.6% after TG (5 patients), 15.3% after PR (6 patients) and 20.7% after nonresectional procedures (12 patients). Mortality rate of operated patients was 16.1% (23 cases).

Mean survival was 10 months after TG and 11 months after PR; nonresectional procedures had 3 months mean survival. No patient is still alive after 2 years after operation. Stage III patients had a little better survival than stage IV.

## Discussion

Actually, the majority of patients affected by gastric adenocarcinoma are diagnosed when the disease is advanced beyond the hope of surgical cure. Most reports confirms that 60-70% of patients are stage III or IV disease. Thus, much of surgery for gastric carcinoma

remains palliative. However, little information is available to determine the best form of palliative treatment and whether this should vary with the site of the spread. These considerations are particularly true in aged patients where prevail the fear that operative treatment may be associated with an unacceptable increase of perioperative morbidity and mortality rate. Indeed, our data and other Author's experience do not support this concern and, on the other hand, survival was significantly better for those aged patients having a laparotomy than those who did not have a surgical approach.

Whether resection should be performed at all in patients with incurable disease is a speculative question. Most Authors argue that resection is preferable whenever possible since this will give a better palliation than will gastroenterostomy. A significant survival advantage could also be demonstrated for patients with disseminated stage IV disease. Resection seems to be necessary in order to relieve symptoms.

Total gastrectomy is generally non accepted as palliative treatment for patients with gastric cancer. The limited survival and poor quality of life for those surviving the operation have been regarded as a relative contraindications to this extensive operative approach. On the contrary some Authors suggest that total gastrectomy is a relatively safe procedure even when performed as a palliative operation. Thus, controversy exists with regard to palliative surgery for tumours involving the proximal or entire stomach.

In our experience morbidity and mortality rates seems acceptable considering the age of the patients and the stage of the disease. We remark that in the second period of the accrual of the cases there is an evident trend to a lower complications rate.

Previous published experiences have all shown longer survival and lower perioperative mortality rates in those undergoing resection when compared with all other forms of palliative treatment, the best results being obtained with partial gastrectomy. In the series of Adson and Remine a significantly longer survival was shown in those patients undergoing resection compared to all others treatments including by-pass procedures. Overall, the quality of life, assessed by relief of preoperative symptoms, was also better after resection than after gastroenterostomy.

In our experience, improved survival has been shown after resection independent of the site of residual disease and even when metastases are present at more than one site. The reasons for this increased survival cannot be explained with certainty. Factors that may be important are the relief of obstruction, relief from ulcer symptoms and the prevention of bleeding. This may help to improve both the nutritional state of the patients and their general well-being.

By-pass procedures generally are not recommended. They provide a poor quality of life and worse survival than resection as confirmed in our experience. Intubation seems to be a poor option, although it has been advocated as the method of choice in order to alleviate dysphagia: the majority of patients survive only three months. Similar results are offered by laparotomy alone.

In conclusion, laparotomy does not increase the mortality rates and the survival rates after resection are significantly longer than after any other treatment regardless of the site of residual disease. Laparotomy is recommended as the method of choice for assessment of spread and resection when feasible is the best form of treatment for gastric carcinoma even in the presence of locally advanced or metastatic disease also in geriatric surgery.

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