

Meeting abstract

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Neoadjuvant chemotherapy in locally advanced gastric adenocarcinoma: our experience in the elderly

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Background

Gastric cancer is a neoplasm with a poor prognosis, often diagnosed in advanced stage of disease, specially in elderly patients. Neo-adjuvant chemotherapy may increase the possibility of complete surgical resection, improving progression-free and overall survival (five-years survival of 36% compared with 23% of patients treated by surgery alone) as shown in the MAGIC Trial by Cunningham et al.

Materials and methods

Since November 2006, at our Institute, selected patients affected by gastric adenocarcinoma were enrolled in a program of peri-operative chemotherapy; six of them were over 70 years old. The neoplasia was diagnosed and staged by gastroscopy, endoscopic ultrasonography and total body ^{18}F FDG-PET-CT. Inclusion criteria were: cT2N+M0 or cT3-4N × M0, age <75, Karnofsky Performance Status >60%, no hepatic, renal and bone marrow failure (creatinine <1.5 mg/dL; clearance creatinine >50 ml/L; total bilirubin <2 mg/dl; white blood cells >3500 mm³; platelets >140000/mm³). The patient underwent three cycles of pre-operative chemotherapy with Epirubicine, Cisplatin and 5-Fluorouracil (ECF) as MAGIC Trial showed. After every cycle hepatic, renal, bone marrow and cardiac functionality were evaluated. Fifteen days after the third pre-operative ECF cycle the patients underwent endoscopic ultrasonography and total body ^{18}F FDG-PET-CT to evaluate the tumor response to chemotherapy, then they underwent surgery. Thirty day after surgery they started the first of the three post-operative ECF. One patient just

finished pre-operative chemotherapy and she will be operated in four weeks. Clinical and pathological characteristics of patients are summerized in Table 1.

Results

All patients completed the pre-operative chemotherapy without toxicity. Three patients underwent D2 total gastrectomy, one patient D2 subtotal gastrectomy and another patient, with diffuse pattern adenocarcinoma and lymph node metastases (N3), underwent D1 total gastrectomy. No peri- and post-operative mortality and morbidity were observed. Chemotherapy was started one month after surgery in all five patients. During post-operative chemotherapy one patient developed right subclavian vein thrombosis (close to the site of port-a-cath); in one patient the second cycle of post-operative chemotherapy was stopped due to renal failure. The patient affected by liver metastases and the one with N3 lymph node metastases died respectively 18 and 11 months after surgery because of disease progression. The other three patients are in good conditions with no clinical and radiological evidence of recurrences.

Conclusion

Although surgical resection remains the key component in the treatment of gastric cancer, improved outcome depends on multidisciplinary treatments. Neo-adjuvant chemotherapy may be a valid option in downstaging the primary tumor and increasing resectability rates, as shown by MAGIC Trail. Our little experience shows that peri-

Table 1: Clinical and pathological characteristics of patients.

Patient	Age	Neoplasm localization	Histologic type (Lauren)	cTNM pre-NAC	cTNM post-NAC	Surgery	pTNM	TRG (Becker)
1 M	74	Antrum	Intestinal	T3 N+ M0	T2 N+ M0	D2 gastrectomy, splenectomy, hepatic wedge resections	T3 N1 M1	3
2 F	71	Small curve	Intestinal	T3 N+ M0	T2b N+ M0	D3 gastrectomy	T2b N1 M0	3
3 M	75	Angulus	Diffuse	T3 N0 M0	T2 N0 M0	D2 gastrectomy	T2a N0 M0	2
4 M	74	Body	Diffuse	T3 N+ M0	T3 N+ M0	D1 gastrectomy	T3 N3 M0	3
5 F	75	Angulus	Intestinal	T3 N+ M0	T2 N0 M0	D2 gastrectomy	T1 N0 M0	1
6 F	71	Oesofagus-gastric junction (Siewert III)	Intestinal	T3 N+ M0	T2 N+ M0	-	-	-

operative chemotherapy with ECF has low toxicity and it may be chosen in elderly affected by locally advanced gastric adenocarcinoma.

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