

CAN HIGH LEVELS OF PREOPERATIVE CARBOHYDRATE ANTIGEN 19-9 BE A PREDICTOR OF SURVIVAL IN GASTRIC CANCER?

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BACKGROUND

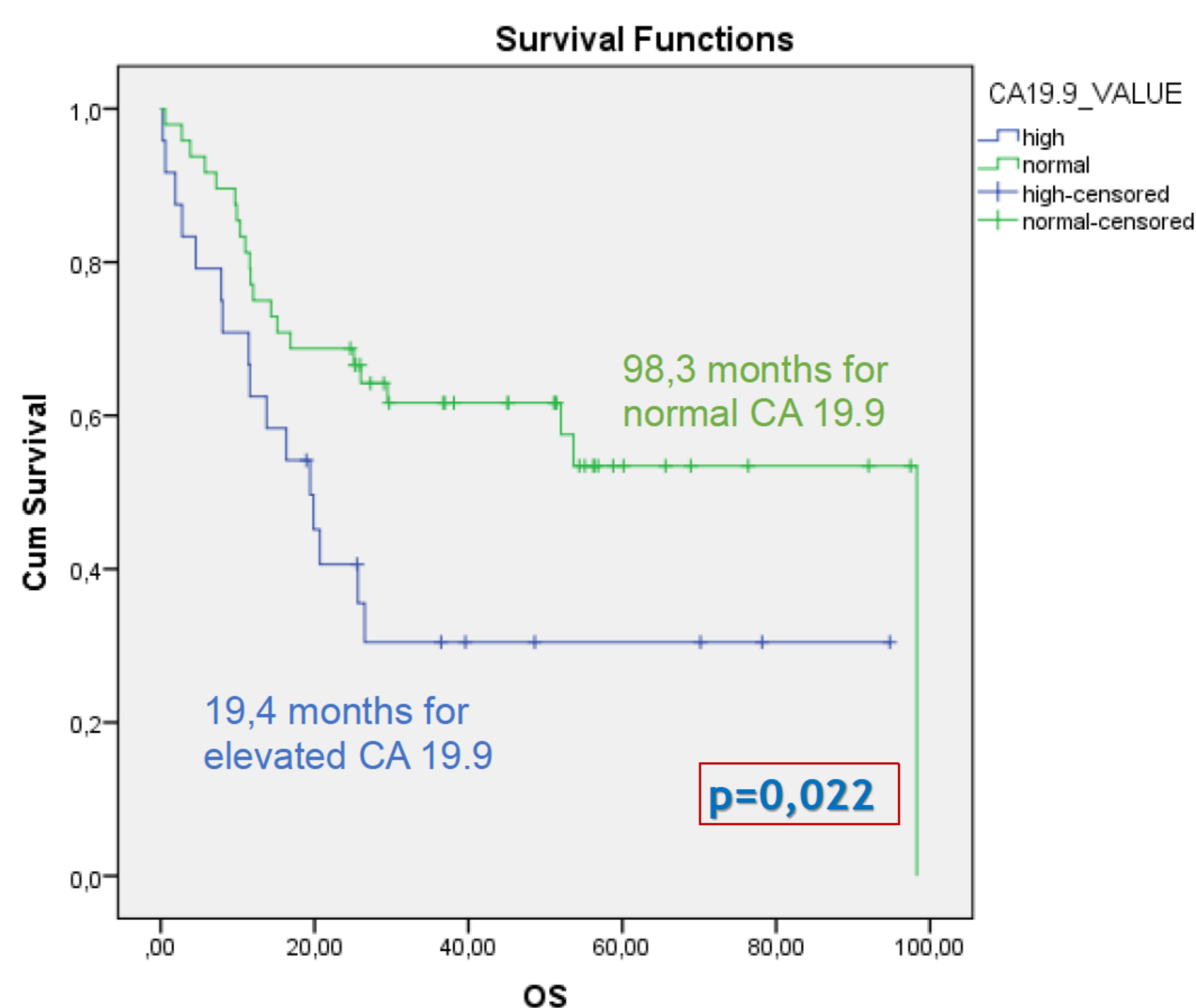
Carcinoembryonic antigen (CEA) and carbohydrate antigen (CA) 19-9 are commonly used tumour markers for monitoring treatment and recurrence of gastric cancer. However, their value as a preoperative prognostic tool is not well established.

METHODS

Between 2006 and 2012, a total of 202 patients underwent surgery for histologically confirmed gastric cancer (32 patients were excluded due to incomplete information): 24 patients had elevated serum levels of CA 19-9 preoperatively and 146 patients had normal levels (upper limit: 37U/mL). For this study, 48 patients were randomly selected from the latter group to serve as controls (matched for age, sex and tumour staging). Overall survival (OS) was calculated using the log-rank test. Standard statistical test were used.

Characteristics	Normal CA 19-9	Elevated CA 19-9	p value
Gender			
Male (n)	36	15	0,271
Female (n)	12	9	
Mean age (yr)	63,4 ± 9,3 (39-82)	66,2 ± 11,5 (47-90)	0,29
Location			
fundus	4	2	0,417
body	11	6	
antrum	29	12	
antrum and body	4	4	
Histological subtype			
Diffuse	19	8	0,644
Intestinal	27	13	
Mucinous	2	3	
Tumour grade			
G1	12	7	0,572
G2	6	4	
G3	13	3	
NA	17	10	
Surgery			
Total gastrectomy	9	5	0,896
Sub-total gastrectomy	31	14	
Palliative	8	5	
TNM Stage			
stage I	10	4	0,957
stage II	17	9	
stage III	11	5	
stage IV	10	6	
Metastasized resected nodes (mean)	4,18 ± (5,02)	3,37 ± (4,96)	0,31

Table 1 - Baseline characteristics of patients with normal and elevated CA 19.9



Curve 1 - Overall survival of patients with normal and elevated CA 19-9. Median OS of both groups combined was 52 months

CONCLUSIONS

Patients with normal preoperative CA 19-9 levels have **better prognosis** than patients with elevated levels. As such, preoperative CA 19-9 levels should be considered an **independent prognostic factor** in predicting OS after gastric cancer resection, therefore contributing to a more accurate and individualized prognosis for these patients.

REFERENCES

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